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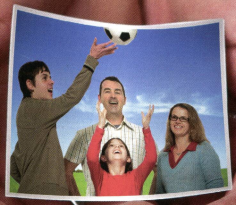
Top laundry detergents rated

Product tests

- Ebook readers
- TVs
- Fridges
- Energy meters
- Mobile phones
- Camcorders
- Blu-ray players
- CFLs

210 products reviewed!



How much health insurance do you really need?

The right hot water system for you

It's a small world for tall consumers

17,000 and counting

CHOICE continues to bring you the rigorous and in-depth analysis you've come to expect from us.

I would like to say thanks to many of you for taking me at my word when I said I wanted your thoughts on the newly designed magazine. I have now responded to all of you, but please keep the comments coming in; it's only by hearing from you that we can best meet your needs.

I'm pleased to say most of you have said you find the magazine easier to read and more engaging than before, but in conversations many of you have impressed upon me the need to keep the detail behind our tests and investigations. I can assure you that we won't lose the detail, but we'll also do our best to present it in an engaging and enticing way.

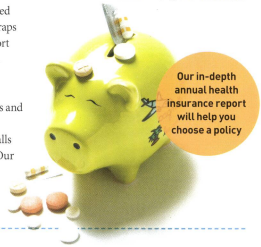
Serious in-depth reports are a cornerstone for CHOICE. Take our annual health insurance report featured this month (page 16). A glimpse behind the scenes at CHOICE reveals our Money Team expert, Brendan Mays, beginning the project some months ago; his first task to wade through more than 17,000 health insurance schemes before he could even start to scrutinise a smaller sample. He then matched policies to suitable categories so you can mix and match them to your own situation and needs, whether you're a young single or couple, mature couple, young family or family with older kids.

For one part of his research, Brendan looked at 10 commonly restricted hospital services, such as joint replacement surgery and eye surgery, and also considered the number of services without an out-of-pocket expense. Only funds with a rating of 8/10 or higher were recommended. On top of this, Brendan surveyed all the insurers about additional services such as accident and ambulance cover. Finally, he also checked product disclosure statements for any traps hidden away in the fine print. This report then went through a robust verification process, where every fact was cross-referenced and double-checked.

And what is the end product of weeks and weeks of research and writing, piles of paperwork on Brendan's desk, phone calls checking and rechecking each policy? Our health insurance story is packed with information that takes the hard work out of choosing the right policy for you and your family. This is what we do every day at CHOICE, and what we passionately believe is vital to fulfilling our vision to make Australians the most active and savvy consumers in the world.

I hope you enjoy this month's magazine and, as always, contact me to share your thoughts and feedback on the number or email below. Or, you can contact our Editor, Mary Gillespie, at mary@choice.com.au

Nick Stace, CEO
Phone 1800 266 786
Email nick@choice.com.au



CHOICE. The People's Watchdog

CHOICE gives you the power to choose the very best goods and services, and avoid the worst. We pay full price for all the products we test, so we remain 100% independent. We don't take advertising and we don't accept freebies from industry.
We're not a government body and our consumer publishing and advocacy is almost entirely funded by subscriptions to our magazines, **www.choice.com.au** and from other services we supply to benefit members and consumers.

CHOICE product ratings are based on lab tests, expert assessments and consumer surveys. CHOICE staff also research a wide range of consumer services. They reveal the truth behind the facts and figures, and investigate the quality and the claims.
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This month we take a look at energy meters and how they can help you save on your power bills

Rebecca Gatto from our Household content team powers up

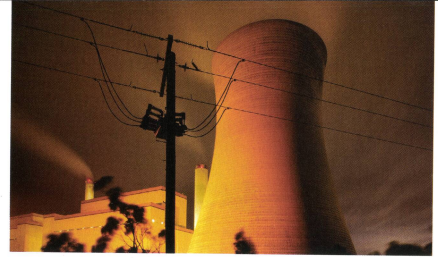
Power leak

No matter how a carbon tax may impact the economy or what shape it takes, energy costs are going through the roof and climate change is not going away. A recent report commissioned by the Energy Users Association of Australia (EUAA) claims government waste has a lot to do with it.

The report is consistent with the findings of Professor Ross Garnaut, who was commissioned by federal and state governments to look into climate change. It points out that electricity price rises stayed within 5% of the CPI between 1986 and 2008, but have jumped to about 40% above the CPI since then. It also says government-owned energy distribution networks do a poor job of getting power to customers. EUAA head Roman Domanski claims waste of electricity "flows through directly into the large increases in prices people are seeing".

John Conner of The Climate Institute agrees. "Some 70% of the increases in electricity prices to date have actually been around issues to do with the networks." While the government gets its act together, we're urging consumers to save energy and money by taking part in the 10% Challenge – see page 12.

ANDY KOLLMORGEN

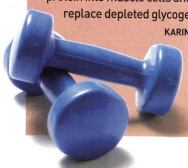


> "Some 70% of the increases in electricity prices to date have actually been around issues to do with the networks and aren't at all related to action on carbon pollution or climate change"

Choc milk 1, sports drinks 0

Forget expensive, high-tech sports drinks – your best post-exercise recovery option could be low-fat chocolate milk. Proteins in milk repair muscle damage that leads to delayed onset muscle soreness, the water content and minerals replace lost fluids and electrolytes, and sugar stimulates insulin production, helping drive protein into muscle cells and replace depleted glycogen.

KARINA BRAY



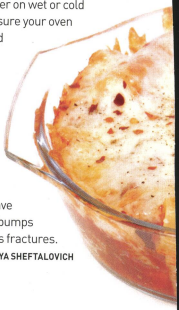
Shattering news

CHOICE's sister US publication conducted a year-long test on a variety of cookware, comparing soda lime glass with borosilicate. *Consumer Reports* found that soda lime glass, used in US-manufactured Pyrex and Anchor Hocking dishes, was more likely to shatter under test conditions than borosilicate, used in Marinex and European-manufactured Pyrex.

The tests were designed to assess the margin of safety to thermal shock. Dishes were filled with sand, which gets much hotter than food, and placed into ovens at varying temperatures. They were then removed and put onto a wet granite countertop, contrary to instructions for use. At 232°C, all soda lime Pyrex and Anchor Hocking dishes shattered on the countertop, while the borosilicate Pyrex stayed intact.

Australia has both soda lime and borosilicate cookware on the market. As winter temperatures drop and warming casseroles beckon, CHOICE recommends consumers follow instructions for use carefully. Hot glassware should only be placed on dry cloth, never on wet or cold surfaces. Make sure your oven is fully preheated before placing glassware into it. Don't add liquid to hot glassware or move dishes straight from freezer to oven. When using dishwashers, leave buffer space, as bumps can lead to stress fractures.

ZOYA SHEFTALOVICH



BREAKING NEWS

Not washed up

CHOICE's washing machine test is one of our most popular with members, and we always strive to deliver better results. In light of research suggesting that most Australians don't completely fill their washers, we're undertaking a pilot program for washing machines. In addition to the innovative partial load in our previous test (*CHOICE*, April 2011), we will be testing a 60% load, which is closer to how consumers actually use their machines. Our findings will be revealed in a future issue.

Stroke of hope

Research suggests olive oil may prevent the elderly from suffering strokes. A French study of 7625 older people from three cities found those who regularly used olive oil had a 41% lower risk of stroke over six years compared with those who consumed none. No distinction was made between the types of olive oil consumed, and further trials are needed before new stroke prevention recommendations are made.

Free hearing test by phone

Loud music from concerts, discos and personal music players can cause permanent hearing loss. Worried? You can get your hearing tested for free over the phone by calling Australian Hearing on 1800 826 500 from a landline.

ISTOCKPHOTO

Waiting game

Waiting for health care can have a big effect on your quality of life. Australians are covered for emergencies, but without private cover, you may have to go on a public hospital waiting list for elective surgery.

About half of all people receive elective surgery in under 35 days, according to the COAG Reform Council, but for less serious conditions the wait is extended. Before being put on a waiting list, people are given a clinical urgency category. According to the latest Australian Institute of Health and Welfare reports, there is notable variation in the analysis of urgency. So, you could either be doing the waiting list shuffle, or be one of the 5500 or so people admitted within 80 days last year because their condition became an emergency.

Either scenario is tough, but it gets worse. You could end up as one of the 8245 people deemed not contactable or deceased in a 12-month period to 2010. About 20% of these patients were on the list for more than a year. There's no way to know exactly how many people died, or how many deaths were caused by waiting. Still, it's a consideration.

To find which health insurance policies we recommend, see page 16.

BRENDAN MAYS

Whoops!

- In *CHOICE* April p55, we called a recommended fridge Haier HDT647AS. It should read Haier HTD647AS.
- In the profile photos for our mid-priced vacuum cleaner test (June, p56), we labelled the vacs incorrectly. Labels 1 and 4 should be the other way around.
- In our ovens report (May p48) we stated that the Miele's H 5241 BP grill cannot be lowered for cleaning. In fact, it can.

New-wave lighting

Light-emitting diodes (LED), the newest player in energy-efficient lighting, may take over from compact fluorescent lights (CFLs) in the next few years. Unlike CFLs they don't contain mercury, and they're very energy-efficient and long-lasting – potentially 10 times longer than CFLs.

General lighting LED lamps for ordinary household light fittings are now appearing on the market, but the dimmable Master LEDbulb, slated for retail release in August, is one of the first 60W-incandescent equivalents from a major manufacturer.

The unusual design hints at the technical challenges that must be overcome for an LED bulb to be reliably equivalent to a 60W globe. LEDs are sensitive to heat, which diminishes lifespan, so a heat sink is used to keep them cooler. And a yellow plastic coating filters the typically blue-white LED light to a warm white colour.

The Master LEDbulb activates almost instantly with good, bright light. Output diminishes a little over an hour or more, but this isn't noticeable to the naked eye. The claimed output is 806 lumens, which is consistent with our test results, and is easily equivalent to a 60W incandescent.

We'll keep the LED bulb on our test rig for several months of lifecycle testing, along with a new batch of CFLs. Look out for an update in the December issue.

CHOICE VERDICT

Is the LEDbulb worth the expected price of $60? Philips claims an impressive 25,000-hour (15-year) lifespan for it, but you could use four good 6000-hour 12W CFLs instead, and at about $6 each, they're cheaper overall. However, prices will come down as LED bulbs become more common, and the fact they're mercury-free and longer-lasting is good news for the environment.

We've checked several samples after 100 hours and so far they're performing well, but we're reserving our score until our 2000-hour report. Turn to page 55 for the latest on our CFL testing.

CHRIS BARNES

PHILIPS MASTER LEDBULB MV 12W
PRICE $60 (expected)
CONTACT www.philips.com.au

Allergy quacks fined

The ACCC has undertaken proceedings against two companies and two individuals – one a qualified medical doctor – for making false claims and misleading consumers about the BioFast allergy elimination program.

This program involves identifying allergens by testing muscle resistance to pressure applied while the patient holds a vial of the suspected allergen (a process often called applied kinesiology). This is based on the principle that allergens temporarily weaken the long muscles of the body. The purported treatment then involves the application of pressure or needles to points on the patient's body, while they're exposed to the potential allergen. Techniques including "detoxification salts" and "sublingual desensitising drops" are also used.

The Federal Court found that claims the program identifies, treats, eliminates and/or cures allergies amounted to false, misleading and deceptive conduct. Of particular concern were claims that parents and carers could be instructed to test for, identify and treat allergies in a child, and that after treatment the child could safely be exposed to the allergen – clearly not the case for genuine allergies identified by medical testing.

The Federal Court imposed penalties totalling $185,000 plus costs on those concerned. Turn to page 28 for more on questionable alternative diagnostic tests.

KARINA BRAY

$3-4 billion

Groupon's estimated revenue for 2011 – up from $89m in 2010

More bite in super-complaints

CHOICE has joined forces with NSW Fair Trading in an 18-month pilot project to help identify ongoing consumer issues that add up to systemic failures.

Through a new super-complaints system, CHOICE will present evidence to Fair Trading of market failure in any sector that presents significant risks to consumers. Fair Trading will then research and assess the issue and report publicly on actions.

Importantly, CHOICE is not accepting any government funding for the project.

The project, based on a super-complaints system operating successfully in the UK, involves documenting facts and evidence of market activities that pose a continuing threat to the safety and welfare of consumers.

Consumers and other consumer groups nationwide are invited to submit suggestions for potential super-complaints by emailing supercomplaints@choice.com.au.

CHOICE hopes that a similar scheme will be rolled out on a national level.

KATRINA LEE

Daily duds

Daily deals sites are becoming increasingly popular with Australian consumers, with web traffic skyrocketing by 1000%, according to Experian HitWise. But despite their popularity, some consumers are facing hurdles when trying to redeem their coupons.

CHOICE reported on several such problems in our April issue (or see choice.com.au/missingdeals), and it seems the industry is taking note. Daily deals site Cudo is set to launch a new code of conduct, having drafted a set of principles. Cudo is also encouraging other industry players to sign up.

"We welcome any move to improve customer care and increase consumer rights," says Christopher Zinn, CHOICE Director of Campaigns and Communications. "But this must be done quickly and properly. The telco industry's self-regulation has shown us that it's easy to have a code of conduct pinned up on the wall, but that doesn't always lead to positive change."

ZOYA SHEFTALOVICH

Reconnecting telco customers?

A sea change could be in the offing in the mobile phone sector – or maybe it's just another report. After a year-long investigation into customer service issues in the telco industry, the Australian Communications and Media Authority (ACMA) says it's ready to step in and lay down some new rules. ACMA's 130-page *Reconnecting the Customer* report, released last month, is only a draft public inquiry, but it makes bold suggestions.

While giving a few providers brownie points for making improvements in the customer–provider relationship, the regulator "has come to the view that neither action by individual service providers nor enhanced code rules are of themselves likely to be sufficient to drive the necessary change to regain consumers' trust and confidence".

Instead, ACMA is recommending new regulations and minimum service requirements focusing on areas that cause the most complaints – misleading advertising and bill shock.

Telcos may soon be required to allow customers to monitor, in real time, their accumulation of charges during a billing period – a reform that's likely to be welcomed by many consumers.

ANDY KOLLMORGEN

➤FIRST PERSON

Coffee, stat!

Stand-up comic, author and broadcaster Terri Psiakis is a reluctantly reformed coffee snob.

Before I started breeding, I enjoyed coffee. But now I have a 19-month-old whose nocturnal habits regularly mimic those of a possum with ADHD, I need coffee.

I used to be an artisan snob – if it didn't arrive perfectly poured in a glass at my inner-city café table, I wouldn't drink it. Nowadays I've gone to the dark side: chain store coffee. I'm even in the Frequent Sipper Club – like the Qantas Club, but with more rampaging toddlers and no air travel.

Chain store cafés are full of people like me: suburban mums trying to fit a coffee that didn't come out of our microwave into our offspring's daily routine.

Why are mums so bang-up for a chain store latte? Nobody shoots us death stares when we walk in with a pram. Nobody cares if our kid rips open all the sugar sachets because that's what all the kids are doing. And can we get a free babyccino? Yes, yes we can.

There's a reassuring sameness to every chain coffee outlet. I could be anywhere in the world and my vanilla latte would taste the same. I'd always know where to find the sprinkles-shaker. And I'd know the best place to hide all those torn sugar sachets.

Dodgy fuel dealers

Consumers might be getting more than they bargain for at the bowser. CHOICE has heard a number of anecdotes about stations selling unleaded petrol as premium or selling contaminated fuel, causing damage to cars resulting in mechanics bills running into the thousands. Despite a federal government monitoring program designed to ensure consumers get what they pay for, some retailers seem to be slipping through the net.

You can check if you've been sold an inferior product by measuring mileage: a tank filled with premium travels further. The ACCC also relies on complaints from within the industry and from the public to detect dodgy traders. Sale of contaminated fuel, incorrect labelling and reports filed by consumers are monitored by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPC). It says 264 reports were lodged during the 2009/10 financial year.

There are currently no resources available to warn consumers about dodgy traders. Privacy laws prevent the disclosure of the results of DSEWPC's testing. If you suspect you've purchased contaminated or incorrectly labelled fuel, contact DSEWPC on 1800 803 772 and email us at investigation@choice.com.au.

KAT HARTMANN

ISTOCKPHOTO

A playful offering

The Sony Ericsson Xperia Play is a combination of devices that come together surprisingly well for a first-generation product. It won't fit nicely into your pocket, and it doesn't sit comfortably in your hand when talking on the phone, but it's an attractive device for gaming.

Using the latest Android operating system, this touch-screen smartphone slides apart to reveal a number of keys beneath its screen. This makes it bulky, thicker and heavier than the iPhone 4 or Motorola Defy. It also feels more plasticky. We can't say whether it will break more readily than non-sliding phones, but moving parts do tend to break more than non-moving parts.

Texting in portrait mode is difficult unless you have tiny hands and short fingernails, but is much easier in landscape. The space bar is a little narrow and the full stop button is too close to it for those with large hands, so it takes getting used to. In the meantime, your.sentences.may.look.like.this. We were disappointed that our review model didn't have Swype pre-installed for easier texting, but this can be rectified with some fiddling.

The touchscreen is responsive and there's a good 5.1 megapixel rear camera. Switching between camera and video is seamless. The forward-facing camera is low definition but easily accessible. Browsing speeds are good and viewing Flash is simple.

The Play comes with plenty of pre-installed applications and claims up to eight hours of talk time, a little more than others we've seen. Snapping the cover off the rear to remove the battery or access the micro-SD or SIM cards is at first alarming – it feels as if it's breaking, but you get used to it.

Those familiar with the Sony PlayStation Portable or PlayStation will recognise the classic keys when the phone is opened, and the left and right shoulder buttons to the right of the screen when holding it in portrait mode. Though it comes with an 8GB micro-SD card, gamers may need to upgrade to 32GB. With 50 games available at release, there are potentially more to come, though that will depend on the uptake of the Play and similar devices.

CHOICE VERDICT

Although it has a large clear screen and is generally easy to use, the Xperia Play's bulky lines and unwieldy handling as a phone won't appeal to everyone. For those used to the interface of the PlayStation gaming devices, however, this is a promising phone, with some good features for a first iteration. **MATTHEW STEEN**

SONY ERICSSON XPERIA PLAY
PRICE Varies from Telstra, Optus and Vodafone, depending on plan
CONTACT www.sonyericsson.com
★★★☆☆

Calling Dr Ford

A prototype Ford car seat uses contactless ECG technology to monitor a driver's heart, issuing a warning to seek medical attention if it detects an oncoming heart attack. The technology has some interesting applications, such as collecting health data for use by a doctor or even calling an ambulance for you, but CHOICE wonders whether Ford is targeting the right condition. Driver fatigue is a leading cause of motor vehicle accidents and technology could be better used to help reduce the 20% of fatalities caused by tiredness. **EMILY MCCLUSKEY**

Crunch time on credit surcharges

On 8 June the RBA announced consultations on changes to the rules governing credit card surcharges. These surcharges were targeted for review by the Australian government in late 2010, following the release of CHOICE's research on surcharges commissioned by NSW Fair Trading. Our research found 88% of respondents had paid surcharges over the previous 12 months, with the worst surcharge offenders including airlines, telcos, and taxis. The RBA's concerns were backed by credit card provider MasterCard, who have said there is no question surcharges are well above the costs to merchants for transactions. UTA MIMH & MATT LEVEY

I say

Picture it: Narita Airport, Tokyo, 23:00. Two Aussie travellers sprinting behind a petite, speedy Japan Airlines (JAL) staff member through airport security, customs and onto a shuttle to another terminal, past blurring gates and finally onto a fully boarded Jetstar plane literally seconds before take-off.

That Jetstar plane, according to our tickets, should have touched down 500km away in Osaka. But Jetstar decided to amalgamate its Cairns-Tokyo and Cairns-Osaka flights hours earlier. The only instructions from cabin crew? "Follow the signs and look for instructions" for the connecting flight. So, like well-behaved sheep we joined the herd off the plane and followed hastily made signs and arrows for Jetstar's Osaka flight. The herd boarded a shuttle to another terminal – seemed unusual, but that's where the signs were pointing. The herd disembarked, us with them. Suddenly we were queuing for customs. Seemed strange to check into Japan in Tokyo when we were headed for Osaka, but surely Jetstar's signs wouldn't lead us astray? And so we made the horrible realisation that the very plane we'd just disembarked was reboarding for Osaka. If we were to have any chance of being on it, we needed to check back into an international airport and be at a terminal one kilometre away in about 12 minutes.

Enter JAL. Seeing two crestfallen travellers, half-a-dozen very concerned JAL staff left their kiosks to help. And so began the sprint.

Jetstar had offered poor or no communication about essential information, leading to the debacle in the first place. But JAL staff politely explained everything, demonstrated genuine sympathy for our situation and liaised with many airport staff while running hundreds of metres for us. Most remarkable of all, they didn't need to – we weren't JAL passengers and they hadn't caused the problem.

The lesson? There's a reason why low-cost airlines are cheap – they're also low-service. When I return to Japan, JAL will be top of my list. That's what outstanding customer service does – it guarantees repeat business. Are you listening, Jetstar?

SAM BUTLER

Do you have a story about a consumer experience you'd like to share? Email us at isay@choice.com.au

Member spotlight

We catch up with Rosalia Horvath from Sydney, NSW, who joined us for the CHOICE Awards earlier this year.

How long have you been a CHOICE member?
Since November 2010, though I was also a member a long time ago.

What did you enjoy most about the CHOICE Awards?
How well the CHOICE staff looked after their guests. I wasn't left alone for a single minute – there was always someone wanting to have a chat. It made me feel very welcome.

What is the best product you've purchased on a CHOICE recommendation?
My washing machine. I have now had her for 20 years and she is about to die – I'm considering giving her a proper funeral for her dedication to duty.

How do you like to spend your spare time?
I like taking a variety of courses. Earlier this year I did an etching and print-making course, last year I tried floristry, which I loved, and even a horse-riding stint where I broke my arm falling off a horse. I haven't been back to horse-riding but I plan to pick that up again. I also like catching up for a chat and coffee with my friends, going for walks and having picnics, and watching performances at Sydney's State Theatre. There is so much to do and so little time to do it all!

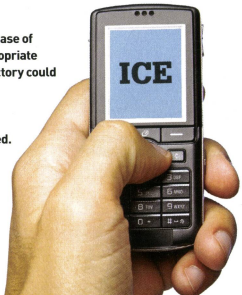
If you could invite five people to a dinner party, who would they be?
It would be my closest friends – I haven't had a party for a while as I have been renovating for years.

What products or campaigns would you like to see CHOICE put to the test in the near future?
Most definitely toasters. I've been looking at them for ages and just can't make up my mind. I'd also like CHOICE to find me a good, cheap non-stick pan, pressure cooker and griller.

If you would like to be our next Member Spotlight, please email your details to inthespotlight@choice.com.au

ICE your mobile!

Entering the acronym ICE – in case of emergency – next to the appropriate person in your mobile phone directory could save your life. If your directory is accessible, emergency services personnel look for ICE if you're unconscious or otherwise impaired. They alert the contact to your predicament and can obtain information about your health, such as allergies or blood type.



ISTOCK PHOTO

Retirement village update

CHOICE raised concerns about a lack of transparency in retirement village contracts earlier this year (see *CHOICE* March 2011 or visit choice.com.au/retirementvillages). We have since made a submission to the Productivity Commission's Inquiry on Caring for Older Australians, recommending that residents' rights in retirement villages should be uniform Australia-wide. In addition, standardised contracts should be implemented to help potential residents compare offers.

In related news, after residents of Queens Lake Village at Laurieton, NSW took on their village operator, the District Court ruled in April that ongoing costs must be directly attributable to services provided rather than some "artificial" or "non-factual formula". The residents had complained to the NSW Consumer Trader and Tenancy Tribunal about the cost of insurance and certain overheads, which were being levied by the village's then-owner Aevum. The residents felt there was no proof that these expenses related to services they were receiving. Though the residents prevailed at the tribunal, new owner Stockland appealed to the District Court over the decision.

We encourage residents to speak up about unfair retirement village contracts, either by contacting the owner directly or the consumer affairs body in your state or territory (visit choice.com.au/consumeraffairs for more information).

KATRINA LEE

➤CAMPAIGN

Challenge accepted

CHOICE has joined forces with advocacy group DoSomething! to launch the 10% Challenge, a campaign to help Australian households and businesses reduce their energy and fuel use by at least 10% and save on bills.

As energy and fuel prices are increasing, the 10% Challenge is about easy steps to reduce bills. Many of these actions cost little or nothing, and make surprisingly little difference to day-to-day lifestyles, but can produce significant savings. Other bigger steps, such as purchasing super-efficient appliances or installing solar hot water or ceiling insulation, can produce lifetime savings that outweigh their up-front cost several times over.

Visit choice.com.au/greenhome to see our mini-site of energy-saving tips and buying guides

CHOICE is boosting its information and advice in these areas to help guide consumers through value-for-money, effective and safe energy-saving decisions. As a first step, visit choice.com.au/10percent, where we bring together our most useful energy-saving information.

MATT LEVEY

Shonky winner Power Balance collapses

According to online business publication *SmartCompany*, Power Balance Australia owner Tom O'Dowd placed his importing business in receivership in May this year with about $800,000 in outstanding debts.

Once the ACCC insisted last year that the Power Balance importer admit there was no evidence behind his claims, the business was doomed. The company was ordered to publish corrective advertising to prevent customers from being misled in the future, remove any misleading representations from its website and promotional material and offer a refund to any consumers who felt misled. At least they still have their CHOICE Shonky!

KARINA BRAY

Setting the standard

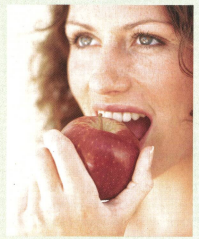
The Australian Quarantine and Inspection Service (AQIS) is currently reviewing export standards for organics, which is an opportunity to swing the industry back in the consumer's favour.

Demand for organics is growing, yet research shows consumers question the integrity of organic certification. This confusion has been attributed to the number of certifiers and the standards they use.

The seven AQIS-approved export certifiers use their own standards, based on the National Standard but customised to meet the needs of their clients. This allows the industry to look after their commercial interests, ignoring consumer needs.

CHOICE's submission to the government's review earlier this year into export controls, including certification of organic produce, advocates for the best-practice Australian Standard for Organic and Biodynamic Products, which we believe will serve consumers' needs better. Keep an eye on this section for the outcome of the review.

EMILY MCCLUSKEY



Bidder beware

The New Zealand government has introduced a bill that, if passed, will result in consumer guarantees applying to online auctions.

CHOICE's NZ sister publication, *Consumer*, has campaigned for this change. They found traders selling hundreds of new computers on Trade Me, a NZ-based eBay equivalent, with a starting bid price of just $1 below a "buy now" price. Placing a bid waives consumer guarantees, as it is considered an auction sale. But clicking "buy now" affords full protection.

Australian laws are similar, and CHOICE is investigating whether traders are using the Place Bid option on eBay to prevent consumers from enjoying the full protection of consumer guarantees.

KATRINA LEE

Tracking gadgets

Australians are increasingly storing sensitive data and information on their smartphones, tablets and laptops. But in cases where these mobile gadgets are stolen or lost, previously secret information may be suddenly unsecure.

Enterprising application designers are developing systems to help users track down devices and remotely erase them if necessary. There are lots of applications available, including Apple's MobileMe (to be replaced with their new iCloud service in spring), and GadgetTrak for laptops, smartphones, iPods and iPads.

ZOYA SHEFTALOVICH

Lab tours

All members are invited to participate in one of CHOICE's famous lab tours, which will be held in Sydney from 10.30am–12.30pm on Thursday 14 July and Tuesday 9 August. The tour is a great opportunity for members to get a behind-the-scenes look at product testing. Meet our specialists, chat with Nick Stace or Christopher Zinn, and have a spot of morning tea. Please register attendance by emailing member@choice.com.au.

Get social...

Join us on Facebook and Twitter for fun competitions and updates on the products we're testing.

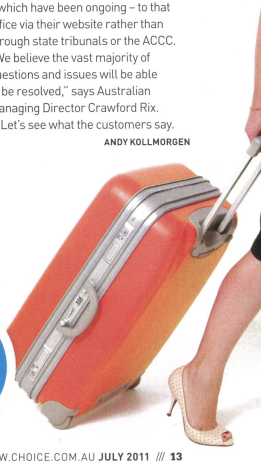
In-house help

In 2009, CHOICE put Tiger Airways on the naughty list for having the worst customer service of any domestic airline in Australia. It was a serial surcharger, and service was so bad that consumers sometimes couldn't find out if flights had been changed or cancelled.

Later that year, the Singapore-based carrier added customer service staff to its Melbourne office. Now, Tiger is asking customers to direct complaints – which have been ongoing – to that office via their website rather than through state tribunals or the ACCC. "We believe the vast majority of questions and issues will be able to be resolved," says Australian Managing Director Crawford Rix.

Let's see what the customers say.

ANDY KOLLMORGEN



Your Say

We want to hear from you. If your experience is not good, then you can help other CHOICE members avoid scams and rip-offs. If you've had a great response to a complaint you've taken to a manufacturer or retailer, our members want to know about that too! Email us at yoursay@choice.com.au or write to Your Say, CHOICE, 57 Carrington Road, Marrickville, NSW 2204. Letters may be edited for length and clarity.

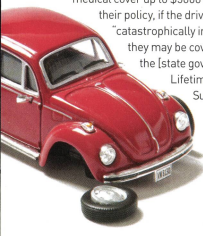
Part of the family

Your story about ancient appliances (*CHOICE*, May 2011) was very interesting. My 1969 Westinghouse refrigerator (REJ-143-11) is not only a veteran but part of our family history. It was acquired after a dispute between my mother-in-law and a retailer over a faulty new fridge. My in-laws bought another fridge while the dispute continued, only to be offered a replacement they no longer required in an out-of-court settlement, which they donated to us. It still works perfectly, despite being installed in numerous houses since 1969, and has only once needed repairs – a new thermostat costing $83.

Judith Swain, Mira Mar, WA

Finding fault

As we have our two cars insured with AAMI, both comprehensive and CTP, we decided to question AAMI having read your story highlighting that AAMI is the only insurer in NSW where a driver at fault is not covered in the event of an accident (*CHOICE*, May 2011). In response, AAMI told me that although medical cover up to $5000 is included in their policy, if the driver at fault is "catastrophically injured", then they may be covered under the [state government's] Lifetime Care and Support Scheme. But according to your story, AAMI does not cover the driver at fault.



As all of our insurance policies are with AAMI, and we have never had any issues with them in the past, could you please clarify your position?

Colin Pirie, NSW

CHOICE SAYS *We're glad you've had a positive experience with AAMI, which*

LETTER OF THE MONTH

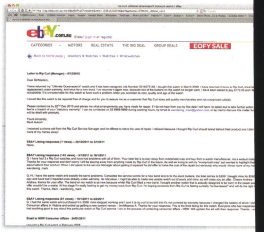
Ripped off?

I bought a Rip Curl watch in February 2008. It was one of their more expensive watches at $400, and for that money I expected a quality product that would last for quite a few years.

Unfortunately, in the first year I had the battery replaced (under warranty) and the band replaced at a cost of $80 by Rip Curl (not under warranty). Less than two years later, two of the four buttons (to access and set up the watch) were frozen and no longer worked. The Rip Curl service manager said this was the result of "general wear and tear" and was quite "normal". For a watch that is designed for surfers and promoted by surfers? To top it off, I was quoted $170 for repair of the watch.

Although I argued my case with both Rip Curl and NSW Fair Trading, the only result I obtained was an offer from Rip Curl to halve the cost of the repair. I refused because I didn't want to waste any more money on something that was obviously not designed for its intended purpose.

I decided to list my Rip Curl watch for sale on eBay, with my story including letters and emails to Rip Curl and Fair



Trading and their responses in the description field. I started receiving encouragement and other tales of Rip Curl woe from those who viewed my listing. To date, I've had more than 1600 people view my ad, and I'm sure I have cost Rip Curl more than the $170 it would have cost to fix my watch in lost business. That really does make me feel a little better at the end of the day!

Mark Aubert, Dee Why, NSW

CHOICE SAYS *Mark's frustration is understandable given the price he paid for the watch, and the marketing surrounding the product, which as he says claims it will be hard-wearing and durable. As the watch was bought in 2008, it is not covered by the consumer guarantees that came into force this year, and given NSW Fair Trading could not provide him with a resolution, he cannot take his complaint much further. But Mark didn't give up, and found a creative way to voice his dissatisfaction. CHOICE applauds his determination.*

ISTOCKPHOTO

scored highly in our last comprehensive car insurance review. As for CTP insurance, the $5000 up-front accident cover is a regulated requirement in NSW, not an additional protection provided by AAMI. Some insurers in Queensland provide this cover as an additional benefit. At the time of writing, AAMI does not provide additional cover on top of this, and remains the only insurer in NSW to do so. You can check this on each insurer's respective website. Allianz, for example, provides an extra cover of $250,000 for at-fault drivers who are injured.

However, at-fault driver cover on your CTP is not a cure-all – it usually only pays a benefit for specific incidents. Losing a limb typically provides a benefit of $50,000 for at-fault drivers, for example. Motorcycle riders are often excluded from the additional at-fault cover, and sometimes so are drivers under 25. It's worth considering when insurers are otherwise offering a very similar price and service, but if you want full protection, consider a life insurance product, such as one with income protection.

Rural choice

We enjoy your magazine. But it can be a double-edged sword for us, as it tends to make us want things that we had not really thought about before!

Living in a small rural town, the recommended brands or items aren't always available. Our nearest city, Wagga Wagga, is more than 100km away, with more shops and a bigger range of goods available. But living in a rural town gives us a different advantage. We know the local Retravision store owner, Michael, well and can show him CHOICE's recommendation and ask him to order it in for us if it is not in stock.

One further advantage is that we're able to take an item home and try it out, and if it doesn't do what we want, we can bring it back in the original packaging.

Colin and Pat Ludford, Tumut, NSW

CHOICE SAYS *It's great to hear your local retailer is providing something extra in an age where online retail is booming. In our recent submission to the Productivity Commission retail inquiry, we said we'd like to see traditional retailers innovate, while also acknowledging advantages of these stores, such as the ability to easily approach a shopkeeper when you need a refund.*

Photo finish

I'd like to thank Fujifilm for replacing a camera. We paid $120 for it in February 2010; by April that year we had to take it back to the retailer as the lens wouldn't stay out when the camera was turned on. The retailer sent it to Fujifilm, who dismantled the camera, replaced the main powerboard assembly and gave it a full clean and test, all under warranty and without charge.

In January 2011, we took the camera back to the retailer again with the same problem. Again it was returned to Fujifilm, again repaired, still under warranty – just. In May 2011 the camera had the same lens problem again, but this time it was out of warranty. The previous repair only guaranteed it for 90 days, so this had run out too.

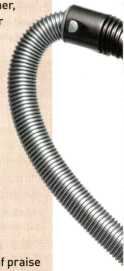
After ringing Fujifilm and being on hold for 24 minutes I left a message for someone to call me back. Three hours later, with no return call, I rang again and explained the problem to a customer service rep. She suggested I post the camera directly to them with a covering letter. In six days I received a parcel with a new camera – the latest model – and 12 months warranty.

Belinda Homewood, Alexandra Hills, Qld

Thumbs

Victoria Green from Toowong, Qld, is pleased as punch with the customer care she received from Babyhugs. She was given a cot rocker as a gift in 2007, but after several years of use it stopped working. Victoria contacted Babyhugs and was able to get the unit repaired well outside the 12-month warranty period for just $20 to cover postage.

Irene Rolfe of Warragul, Vic, gives an enthusiastic thumbs up to Dyson. The switch on the handle of her vacuum cleaner, which incorporates a power head, was playing up. She phoned Dyson and, after confirming the serial number of the machine, they very generously offered to send her a new handle and hose at no cost to her. Irene had purchased the unit more than seven years prior, so she found their after-sales service exceptional.



Errol Firminger from Burwood, Vic, is full of praise for Nilfisk (now Nilfisk-Advance). Errol has a stalwart 1960s Nilfisk canister vacuum cleaner, which finally failed when the motor condenser burst. Nilfisk's customer service representative told him that they only knew of the model as one that occasionally comes in for repair. However, Nilfisk cannibalise some of these older machines, so the rep found a similar part and mailed it out to Errol free of charge.

Young singles (and couples)

You're young, healthy and fairly unconcerned about health cover, but you want to save on tax. The cheapest basic policies will allow you to avoid the Medicare Levy Surcharge (if you earn more than $80,000 a year), with minimal policy exclusions. This means you will have your choice of doctor in a public hospital, but no cover in a private hospital and therefore no respite from public system waiting lists. **NIB Public Hospital** also includes basic ambulance cover.

If you are looking for a bit more cover but still looking to save money, check out our Budget Basic policies below. There are still a lot of restricted services and an excess will apply, but you will get ambulance and accident cover. **HCF's Hospital Advanced Savings** policy also provides full cardiac and rehabilitation cover. The **HIF GoldSaver** policy includes private hospital maternity cover.

Basic extras cover will give you cash back for things such as general dental, but you'll need to pick the services that matter when deciding on a policy (at this price, you can't have everything). If you're willing to pay about $10 a month extra, the **PeopleCare** and **GMHBA Silver Extras** policies represent great value and cover more services.

CASE STUDY

Kyle Myers, 28, from Nyngan, NSW, tore his ACL ligament in a weekend footy match. He was told he'd have to wait up to two years for reconstructive surgery at the closest major town, or he could travel to Sydney to reduce his waiting time. He chose to travel, but even then it was nine months before his operation – and the multiple trips cost him time and money. Nationally, more than 50% of people wait longer than 180 days for this procedure, so Kyle has since taken out private health cover.

RECOMMENDED POLICIES – HOSPITAL (MONTHLY PREMIUMS, $)

Cheapest (public hospital only)	ACT/ NSW	NT	Qld	SA	Tas	Vic	WA	Pros	Cons
GMHBA Frank Basic ($500 excess)	38	(A)	41	42	42	42	35	Avoids tax, discount for direct debit	Cover as a private patient in a public hospital only, doesn't avoid waiting lists
NIB Public Hospital ($400 excess)	44	(A)	49	49	40	49	39	Avoids tax, discount for direct debit, includes ambulance	Cover as a private patient in a public hospital only, doesn't avoid waiting lists
Budget basics (basic hospital)									
AHM Basic Hospital ($500 max co-payment)	60	42	64	61	67	63		Includes ambulance cover, cardiac, palliative care	Many restricted services
HCF Hospital Advanced Savings ($450 excess)	56	33	62	62	54	67	42	Includes ambulance cover, cardiac, palliative care	Many restricted services
PeopleCare Basic Private Hospital ($500 excess)	54		54	54	54	54	54	Includes ambulance cover, palliative care	Many restricted services
Budget private maternity									
HIF GoldSaver ($200 excess)	62	(B)	62	62	62	62	62	Cover in a private hospital for many services, including pregnancy	Restricted cardiac services, no ambulance, other restrictions

RECOMMENDED POLICIES – BASIC EXTRAS (MONTHLY PREMIUMS, $)

	ACT/NSW	NT	Qld	SA	Tas	Vic	WA	All therapies (max annual benefit, $)	General dental (max annual benefit, $)	Major dental	Optical	Physiotherapy	Chiropractic	Psychology	Acupuncture	Massage	Ambulance
GMHBA Bronze Extras	17	19	17	19	19	19	17	1770	1000	(C)	✓	✓					
Peoplecare Bronze Extras	14	14	14	14	14	14	14	1870	500		✓	✓	✓			✓	✓

We've listed prices for singles. If you want to take out policies as a couple, you will need to double the price. Maximum annual benefits are calculated assuming all waiting periods have been met. Limits may increase in subsequent years. Where there is no premium price in a particular state, that policy may still be available, but it may not be the best value. **(A)** See Budget Basics for the cheapest NT policy. **(B)** See NT Top Hospital, $500 excess, opposite. **(C)** Combined with general dental.

Young families and mature couples

A family with young (or no) kids and mature couples have similar requirements when it comes to health insurance. You want full cover for your family, but budget is also high on the agenda. You also may not make a claim every year, and that means you can save by adding an excess (if you do expect to claim often, it might be better to look at our Families With Older Kids category on page 20).

The recommended policies here have a maximum excess of $1000 ($500 per person), which means they won't affect tax benefits. Sometimes you can choose a lower excess, so check. Generally, there are no restrictions, but you will need to check for ambulance cover. We've also included some recommendations for extras cover, provided you use these services. The maximum benefit limits are not as high as top extras, but the sub-limits are still generally above average. Both **CUA** and **Medibank** include cover for all the services we analysed.

TIP **Open a savings account and make weekly deposits until you have enough put aside to cover an excess payment. You'll be covered when you need to make a claim and your money will earn interest.**

SPREAD THIN

Late last year, Angelina H had an unprovoked back injury that was diagnosed as two prolapsed discs. She had no private cover and was put in a public hospital ward with four other patients. Staff were excellent but also very busy, making it difficult for them to care for an elderly patient suffering dementia who she shared a ward with. In the eight days Angelina spent in hospital, this patient was often found getting in the wrong bed, attempting to gather change for the bus and offering lollies to other patients. This was difficult for Angelina, who was in a lot of pain. Despite this, she's sticking with the public system for now.

RECOMMENDED POLICIES – TOP HOSPITAL, $500 EXCESS, $1000 MAX (MONTHLY PREMIUMS, $)

	ACT/NSW	NT	Qld	SA	Tas	Vic	WA	Pros	Cons
AHM Top Hospital Level 5 (A)		93						Includes ambulance	Surgery by podiatrists restricted
GMF Silver Hospital	144	113			148	168		Discounts for paying in advance	No ambulance, shared room only
HBF Top							174	Includes ambulance	Surgery by podiatrists restricted
HCF Top Plus ($450 excess)		122		166	176		156	Highest overall gap rating	Surgery by podiatrists restricted
Latrobe X3: Top Hospital	159		159	159	159	159	159	Discounts for direct debits and paying in advance	Ambulance cover in NSW only, surgery by podiatrists restricted
MBF Top Hospital	164							Includes ambulance	Surgery by podiatrists restricted
Mutual Community Top Hospital		95						Includes ambulance	Surgery by podiatrists restricted
Peoplecare Private Hospital			177	177	177	177	177	Includes ambulance	
Qld Country Health Fund Private Hospital			159					No excess for children five years and younger	

RECOMMENDED POLICIES – MID EXTRAS (MONTHLY PREMIUMS, $)

	ACT/NSW	NT	Qld	SA	Tas	Vic	WA	All therapies (max annual benefit, $)	General dental (max annual benefit, $)	Major dental (max annual benefit, $)	Optical	Physiotherapy	Chiropractic	Psychology	Acupuncture	Massage	Ambulance
AHM Lifestyle Extras		54	65	63	62	66	59	4430	500	750	✓	✓	✓	✓	✓	✓	✓
CUA Silver Extras	47	55	55	55	55	45	47	3740	1000	(B)	✓	✓	✓	✓	✓	✓	✓
Medibank Top Extras 55	73	58	55	64	53	72	58	3750	800	500	✓	✓	✓	✓	✓	✓	✓

We've listed prices for two adults (with children, the price remains the same). Couples pay the same amount. If you want to take out policies as a single, halve the price. Maximum annual benefits are calculated assuming waiting periods have been met. Limits may increase in subsequent years. Where there's no recommendation in a particular state, that policy may be available but it may not be the best value. **(A)** No excess, but max co-payment of $1000 per policy. **(B)** Combined with general dental.

Families with older kids

There's no such thing as an average family, but if your household is expanding or already includes active children, it might be best to consider the following top levels of cover with no excess. With a no-excess policy, there are no budget surprises when you claim – and as you would expect, there are minimal restrictions. We've also included top extras with high maximum benefits so the whole family can take advantage of this additional cover. ■

CHECKLIST

- ☑ *Choose an insurer that has an agreement with your local hospital or doctor to save on out-of-pocket expenses.*
- ☑ *Consider buying a policy with higher excess rather than compromising on quality.*
- ☑ *Private health insurance may save you on tax if you earn above $80,000 a year (or $160,000 combined income).*
- ☑ *If you don't have private health insurance by your 31st birthday, there is a lifetime cover loading that increases by 2% each year.*

RECOMMENDED POLICIES – TOP HOSPITAL NO EXCESS (MONTHLY PREMIUMS, $)

	ACT/ NSW	NT	Qld	SA	Tas	Vic	WA	Pros	Cons
AHM Top Hospital		147						Includes ambulance	Surgery by podiatrists restricted
Central West Comprehensive Hospital	158				222			Designed for those living in regional areas, includes ambulance, discount for direct debit	
CUA Private Hospital 100%	214								Surgery by podiatrists restricted, no ambulance
GMF Silver Hospital	191				195	214		Discounts for paying in advance	No ambulance (added extra), shared room only
HBF Intermediate							187	Includes ambulance, discounts for direct debit and paying in advance	Shared room only. You may need to pay a co-payment depending on the hospital
HCF Top Plus				210		229	204	Highest overall gap rating	No ambulance, surgery by podiatrists restricted
Latrobe H3: Top Hospital			227	227		227	227	Discounts for direct debits and paying in advance	No ambulance, surgery by podiatrists restricted
Medibank Top Hospital	215	134		230				Includes ambulance	
Mutual Community Top Hospital		151						Includes basic ambulance	Surgery by podiatrists restricted
Peoplecare Private Hospital			230	230		230	230	Includes ambulance	
Qld Country Health Fund Private Hospital			225					No excess for children ≤ 5	No ambulance
Westfund Classic Hospital			220					Includes ambulance	Obesity surgery excluded

RECOMMENDED POLICIES – TOP EXTRAS (MONTHLY PREMIUMS, $)

	ACT/NSW	NT	Qld	SA	Tas	Vic	WA	All therapies (max annual benefit, $)	General dental (max annual benefit, $)	Major dental (max annual benefit)	Optical	Physiotherapy	Chiropractic	Psychology	Acupuncture	Massage	Ambulance
CUA Gold Extras	84	99	99	99	99	82	84	6250	No limit	2000	✓	✓	✓	✓	✓	✓	✓
Medibank Top Extras 70	105	63	83	79	61	94	87	5525	No limit	1000	✓	✓	✓	✓	✓	✓	✓
Peoplecare Gold Extras	83	83	83	83	83	83	83	9285	No limit	2650	✓	✓	✓	✓	✓	✓	✓
St Lukes Super Extras	70	70	70	70	70	70	70	9700	800	1500	✓	✓	✓	✓	✓	✓	
Westfund Classic Extras	79		79					5770	No limit	650	✓	✓	✓	✓	✓	✓	✓

We've listed prices for two adults (with children, the price remains the same). Couples pay the same amount, or if you want to take out policies as a single, halve the price. Maximum annual benefits are calculated assuming all waiting periods have been met. Limits may increase in subsequent years. Where there is no recommendation in particular state, that policy may still be available however it may not be the best value.

NUTSHELL

- More than 40% of the goods Aussies ordered online in the past 12 months were from overseas websites.
- Industry experts claim better selection and websites is the lure, but consumers say paying a lot less is the real attraction.

Overseas click-athon

Offshore shopping goes viral as Australian consumers vote with their fingers. **Andy Kollmorgen** looks into the current state of play.

Have we reached a turning point in local retail? Over the past 12 months, sales have fallen sharply at bricks-and-mortar stores. At the same time, about 43% of the goods Australians bought online were ordered from overseas websites.

The top-selling items – clothing, electronics, books and sporting goods – often cost half as much and may arrive faster from overseas sites than if shipped from local stores. PayPal, which has 3.8 million Australia account holders, says the service saw a 74% increase in the amount of money spent overseas in 2010, and that in September of last year, 1.2 million Australians bought online from overseas retailers.

Australian retailers have long argued that identical Nike shoes cost $100 in the US and $239 in Australia (for example) because of shipping costs, the exchange rate, the smaller Aussie market, higher store rents and higher wages. But does all that justify the prices Australians are being asked to pay? It's hard to know which part of the retail sector is responsible for inflated prices, but what is clear is that things cost a lot more here than in markets such as the US and UK.

National Retail Association (NRA) head Gary Black tells CHOICE the costs of getting products to Australian consumers are still comparatively high, but adds that dramatic price differences may be isolated cases. "We have a lot of concerns about selective examples," he says. "We need to make sure it's the norm and not some kind of selective comparison." As for the exchange rate, he argues "retailers may have inventory that was purchased under pre-existing exchange rate conditions".

Seeing through smokescreens

For a growing number of consumers, the industry's arguments have worn thin, particularly as many popular products are made in Asia and then shipped to the US as well as Australia. With the dollar having been above parity with the US greenback since October last year, even the government has started asking questions. The Productivity Commission's (PC) inquiry into the retail sector is due to report this November on "issues contributing to the increase in online purchasing by Australian consumers", among other things. CHOICE has made a submission to the inquiry, calling for retailers to pass on to consumers some of the savings they are enjoying due to the strong Aussie dollar, and to bring down the price of digital music and software so that they're comparable ▸

ISTOCK PHOTO

Don't get fleeced

- **Never give out your personal password**, including to the business that helped you set it up.
- **Have up-to-date anti-virus, anti-malware and anti-spyware software** on your computer.
- **Only buy from websites that encrypt your payment details**. You can tell by the https:// in the address bar (rather than http://) and a small padlock symbol. Click on the padlock to view the security (SSL) certificate and check the owner matches the online shop and that the certificate has not expired.
- **Don't use the same password for different sites**, and always use a combination of letters and digits.
- **Always re-check that the domain name matches the website**. For example, cols.com.au might be a fraudulent copy of coles.com.au.
- **Be aware that warranties may be difficult to redeem**, and check on shipping details.

with overseas prices.

One outraged consumer has launched his own examination of pricing. "I am not privy to the inner workings of the retail industry, but I've been looking at this issue closely and keeping track of price differences," says Peter Prysten. "I haven't come across any plausible explanation for why products cost twice as much here as in the US or UK." Prysten points out in his PC inquiry submission that even if the retail industry manages to convince government to impose a 10% tax on overseas online purchases under $1000, as it has tried to do since late last year, Australians shopping at overseas sites would still come out well ahead.

The NRA's submission, on the other hand, is all about the GST, and focuses on lost tax and customs revenue. The NRA says the tax exemption is costing some stores as much as $100,000 per year in lost sales, has led to the loss of at least 2000 jobs so far, and has the government missing out on about $500 million a year.

23%
of Australian adults shop exclusively on Australian websites

34,000
The number of Australian online retailers that accept PayPal

$36.81bn
The amount Australians are predicted to spend on local online retail in 2013

Briefing notes from the Treasury Department to Treasurer Wayne Swan, obtained through FOI laws and published in late May, reveal the government is not inclined to buy the retail industry's story. Treasury officials argue that the favourable exchange rate is driving overseas sales, not the the GST exemption.

Price vs pick

Aussie retailers are not taking this lying down. Some have started charging a "fitting" fee to discourage customers from trying on items for fit and ordering them from overseas for price (the fee is dropped if you buy the product).

PayPal spokesperson Adrian Christie cites overseas competition as a major reason Australian online retail has upped its game over the past year. He says local mainstays such as Bing Lee, Big W, JB Hi-Fi and Country Road have significantly upgraded their websites, putting them on par with overseas sites in the crucial area of the online experience.

This doesn't mean products sold in Australia have gotten any cheaper, but some say price is not the whole story. Christie tells CHOICE the overriding motive is better selection, not savings, and that a core group has been behind the offshore buying spree. "There are some very savvy online shoppers who've been driving overseas sales – the same types who rush out to the stores for Boxing Day sales. But that's just a small part of the total volume, and the buying spree driven by the favourable exchange rate has already peaked."

Christie says overseas sales made through PayPal grew by a full percentage point with each one cent gain as the Aussie dollar went from 85c to 92c against the greenback, but the pattern didn't hold as the dollar climbed from 92c to $1.10

ORTED
CLASS

in early May. A recent Australian Communications and Media Authority report found 56% of consumers surveyed shopped on overseas websites for products that weren't available here, while 41% said cheaper prices was the motive. However, the survey data is from 2009, well before the Aussie dollar passed parity with the US greenback.

More recent consumer feedback received by CHOICE indicates price is now the deciding factor. In our May survey of about 3000 members, almost 50% more chose price than selection as a reason they shop online. And in a May poll asking about price, respondents cited dramatic differences between Aussie retailers and offshore websites for a range of their favourite online purchases. The Australia Institute also conducted a survey of almost 1500 Australians in March that concluded the online retail boom "is overwhelmingly being driven by people wanting to save money".

Super shops

In an informal survey of CHOICE members, staff, friends and industry reps, the following overseas websites emerged as top picks, though some may require use of a third-party shipping service. Four of the online retailers that made the top 10 in our CHOICE Awards are based overseas (marked with *).

- **amazon.com*** (general – won't ship some items to Australia)
- **asos.com** (fashion)
- **betterworldbooks.com** (books)
- **bhphotovideo.com** (camera/electronics)
- **bookdepository.com.uk*** (books)
- **dealextreme.com** (electronics)
- **eBay International*** (auction site)
- **strawberrynet.com*** (cosmetics/beauty products)
- **topshop.com** (women's fashion)
- **victoriassecret.com** (lingerie)
- **wiggle.co.uk** (sports)
- **zappos.com** (general)

A survey of 1500 Australians concluded the online retail boom is "overwhelmingly being driven by people wanting to save money"

Baiting the hook

One reason for the rise in overseas sales is that Australian consumers have increasingly been targeted. Prior to the current online boom it was difficult – sometimes impossible – to shop in the US from the other side of the planet unless you had a US credit card and shipping address. Other shopping destinations posed similar challenges.

Now, Australians are using third-party transaction and delivery services such as PayPal's HopShopGo, US-based Shipito and MyUS.com or Australian-based Price USA to get around this, but their services are becoming less necessary. So far there do not appear to be any equivalent UK services, though many UK online retailers ship to Australia.

A growing number of overseas stores are allowing Australians to shop with them directly. A recent example is the introduction of ShopStyle to Australia in May this year. The site offers shopping at the likes of Saks Fifth Avenue, Barneys New York and other high-end retailers from around the world, and lets you customise your search for retailers that ship to Australia. One of the most popular overseas online destinations for Aussies, UK fashion retailer asos.com, offers free standard shipping to Australia with a 6-12 day arrival window.

But be warned: overseas retailers are well aware of the exchange rate advantage and are not above a little price gouging of their own. A Canon G12 camera available here at a suburban electronics store for $649 was available at US online retailer Ritz Camera for AUD$600 in late May as priced for an Australian buyer. Meanwhile, the price for US-based consumers was US$500 (AUD$472), both excluding delivery. Then again, we found the same camera at another US retailer, 42nd St Photo, for US$477, regardless of where you're shipping to.

High stakes

With Australians expected to spend $34 billion online in 2012, about $14.6 billion dollars of this could be spent overseas if the trend continues. Aussie retail may be at a crossroads. Better-functioning Australian websites with greater selection may bring in more business for local online retailers in the coming months, but price may be more important in the end. As Prysten puts it, "this disparity is very difficult to explain". ■

CHOICE's George Perry is 190cm tall and has to buy his pants online

Tall tales

Australians are getting taller, but it seems manufacturers have yet to catch up. **Zoya Sheftalovich** reports.

Most people never have any problems finding jeans that are long enough. Some can cross their legs in economy seats on airplanes, have plenty of headroom in even the smallest compact car, and never need to apologise for elbowing their more diminutive counterparts in the eye. But there are plenty of consumers who constantly have to adjust to a world that just isn't designed for them. CHOICE uncovers the most problematic areas for those blessed (or cursed) with towering physiques.

Frocking up

Australia has no standards for adult clothing sizes, and designers settle on measurements through a mixture of sales history and guesswork. So it's not surprising that when CHOICE asked tall consumers about height-related difficulties they face, finding clothes and shoes that fit well for a reasonable price were both often cited as epic quests.

Annemarie van Nieuwenhuijze is 179cm tall and her husband is 192cm. "Most shops assume that tall equals fat," she says. "Tops that are long enough are too big in width and look like potato sacks. Smaller sizes make me feel squeezed like a sausage – and I'm way too old to show my belly button! I buy my husband's pants in the Netherlands, where it is much easier to find his size."

Rosemary O'Brien is 184cm tall and doesn't own any long-sleeved shirts. "And I can't remember the last time I paid less than $180 for a pair of jeans – I once spent six months shopping just to find a pair that fit." Finding decent shoes has also been a struggle for Rosemary. "I have size-12 feet. Unfortunately, most shoes available to me are styled for nannas or serve some orthopaedic function."

But the trouble doesn't end there. With many fitting room walls and doors not extending all the way to the ceiling, tall consumers are sometimes forced into contortions to avoid giving other customers an eyeful. "I generally bend at the knees to make things decent," says Rosemary. "In one shop I had to kneel down to try things on. I ended up so frustrated with the whole thing I gave up and didn't buy anything. This is where the internet has saved me."

From A to B

There are plenty of transport options for getting around, but for taller consumers the mode of transport can mean the difference between leg cramps and knee damage. Self-proclaimed roomy small cars can be like sardine cans, and even larger vehicles can be smaller on the inside than they appear. Public transport may not be better, with tall travellers complaining to CHOICE about small seats and less-than-lofty roofs.

Flying can be even more problematic, with tall folks having to squeeze their legs into ever-shrinking economy seats. "Don't blame me if I'm kneeing you in the back, I've just got nowhere to put my legs!" says Amy Bascomb.

These consumers who need the extra space are also fed up with being forced to pay a premium for the privilege of sitting in exit row seats – assuming they're quick enough to

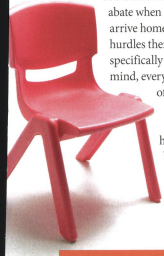
26.2% of Australian men aged 18-24 are more than 185cm tall

9.1% of Australian men aged 55-64 are more than 185cm tall

get them. "Having to pay more for exit rows sucks, and often they're already taken," laments Andrew Burger. "Why charge us for being born model giraffes?" And Opal Welsh's 195cm teenage son doesn't even have the option of pre-paid comfort – he's under the minimum age to sit in an exit row.

The length of pram handles can be an issue for tall parents ferrying their kids around. "The handles never extend far enough!" says one CHOICE reader. "The same goes for most things you push – the wheels get in the way."

Creature comforts



You'd think the angst would abate when our lofty friends arrive home, but many face hurdles there too. Unless built specifically with the tall in mind, every room may be full of frustration. Ceiling fans and low-hanging lights are a health hazard, kitchen benches and sinks are designed for the more petite, and if tables and chairs are too small they offer little in the way of comfort.

Some tall consumers can't even relax in the shower, needing to bend at the knees to get squeaky clean. As one 182cm CHOICE reader puts it, "I have problems finding showers where I can stand straight and wash my hair." And soaking their troubles away with a nice hot bath is near impossible – tubs start from 120cm in length, and even the largest ones are around the 190cm mark.

Sleeping isn't particularly restful when you don't fit in the bed. For Donna Edwards' 196cm husband, the problem is ever-present – "he finds all beds too short, his feet always hang over the end when he sleeps!" In the US, consumers can buy mattresses that are up to 216cm long, but the longest standard Australian king stretches a mere 203cm. Tall Aussies have to spring for pricey, custom-made furniture.

Emergency room blues

While many problems associated with height can seem minor, taller consumers can sometimes be significantly disadvantaged.

When Joseph Canaris needed surgery at a Sydney private hospital, he hadn't bargained on his height being an issue. "I lay down on the bed and the nurse realised immediately it was way too small for me. She brought in a longer gurney but that also was too short, even when it was fully extended. I had to have my legs askew or my knees bent for more than 24 hours. I was really uncomfortable, particularly considering hospital gowns aren't conducive to these kinds of manoeuvres."

The hospital's spokesperson told CHOICE their beds are a standard single size (187cm long) but extensions can be organised with notice. Unfortunately, this was never mentioned to Joseph. "I was measured before being admitted, but no one raised the possibility of my height being an issue. I'm 195cm tall, which isn't all that unusual – surely this has come up before!" ■

9.5% of Australian women aged 18-24 are more than 175cm tall

3.5% of Australian women aged 55-64 are more than 175cm tall

Source: Australian Bureau of Statistics National Health Survey 2004-2005.

Reach for these resources

There are some enterprising retailers and service providers who cater to those outside the average-height box.

Tall-friendly clothes are available in Australia from **Rodd & Gunn** (roddandgunn.com.au) and **King Size** (kingsize.com.au), and online at **talljeans.com.au**, **verticallyblessed.com.au**, **sarahvainandtall.com** and **longtallsally.com**, among others. Some of these retailers also stock larger-sized shoes, as do **Forbes Footwear** (forbesfootwear.com.au), **Rosenberg's of Windsor** (rosenbergshoes.com.au) and online stores **solesearching.com.au**, and **atlastshoes.com.au**.

Selecting the best airline for legroom (or the roomiest seat on board) is easy with **seatguru.com**, which publishes seating charts for most airlines and planes.

CHOICE's long-limbed pram expert Chris Barnes recommends looking for those with extendable handles. He points out that **Stokke** are particularly well-suited to taller parents.

A custom-made mattress will be more expensive but may be worth it. They're available at **madetomeasuremattresses.com.au**, **sydney-furniture.com.au** or **mattressesonline.com.au**.

ISTOCKPHOTO

Full steam ahead

Chris Barnes outlines your greenest and most economical hot water options.

NUTSHELL

- New regulations apply to electric hot water systems. Eventually, many homes will need to switch to gas, solar or heat pump options.
- For more on hot water system regulations and rebates, see climatechange.gov.au.

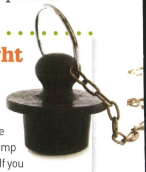
When your hot water system (HWS) goes – whether with a bang or a whimper, or even a flood – it tends to go suddenly. At that point you don't have the luxury of carefully reviewing the available options (unless you you love cold showers). Instead, you get a replacement of the same type ASAP – and blissfully forget about it until next time.

However, water heating can account for a quarter of typical household energy use, so it's worth reviewing your hot water usage and checking out the alternatives now before your current system dies – you may find systems that are less expensive to run and kinder to the environment. And for many people, replacing an old electric hot water system with a similar model is no longer an option. Standard electric systems produce about four tonnes of greenhouse gases per year (on average) – similar to an average-sized car, and about three times as much as gas or solar HWS. To reduce this environmental impact, government regulations now limit the installation of electric HWS.

- Electric HWS can't be installed in any new detached, terrace or town house, or any such existing property where there is access to piped natural gas (some exemptions apply).
- From 2012, this will apply to all existing detached, terrace or town houses.

You don't need to replace a working electric HWS, but if you live in a detached, terrace or town house that has an electric HWS, you will need to consider a gas, solar or electric heat pump system when you need to replace your existing HWS. Electric HWS are still available for apartments and other homes where gas, solar or heat pump systems aren't feasible.

What's right for you?



Regardless of your household size, there's likely to be a gas, solar or heat pump option that's suitable. If you have to go electric, aim for instantaneous or off-peak systems if possible.

Small household (1–2 people): If solar access is good, a gas-boosted solar HWS may be the greenest option, though a gas storage or instantaneous system may be cheaper to install.

Medium household (3–4): Heat pumps and solar HWS can be a better choice due to increased economy of scale.

Large household (5+): You'll need large tanks, and with potentially bigger savings to be made, the upfront cost of going solar may be less daunting. For these households, gas storage units may be more economical than instantaneous systems.

Save energy and money when going away by turning your HWS down to minimum temperature – or off completely

Types of hot water systems

There are two main aspects to a hot water system – how it heats the water, and whether the water is heated instantaneously or stored in a tank.

STORAGE SYSTEMS

The hot water is stored in an insulated tank and heated by an electric element, gas burner, solar collector or heat pump motor. Use too much hot water too quickly and you'll run out before the tank heats up again. Tanks are made from stainless steel, or mild steel with a vitreous coating and a sacrificial anode rod to reduce the risk of corrosion. Anodes must be replaced every five years or so, depending on water quality. Valves and seals also need to be replaced from time to time. A well-maintained tank should last 10 years or longer. Water quality can also affect the life and warranty of a tank – check with your supplier if this affects you.

Electric can be run on a continuous or day-rate electricity tariff, which is the most expensive option, but the water will be heated 24 hours a day and less likely to run out. Running it on off-peak or night-rate tariff can halve the cost, but the water is only heated overnight, so make sure the tank is large enough to last the day. If you run out, you'll have no more hot water until the next morning.

Gas The more stars on the label, the more efficient the system. These are usually installed outdoors, but can be installed indoors with a flue.

Solar Collector panels on your roof heat the water. The water is stored in a tank that is either on the roof (thermosiphon system) or elsewhere in the house (split or pumped system), and is usually electric or gas boosted to maintain supply on overcast days.

Solar systems can be comparatively expensive to buy and install, but this is offset to some extent by rebates (see What You'll Get Back, below). There's a variety of systems available, such as flat panel or evacuated tube. Get quotes from a few suppliers; our 2008 shadow shop found a wide range of prices and offers. Your choice will also depend on the direction your roof faces, overshadowing and any difficulties in accessing the roof. Frost-tolerant panels are needed in cold areas.

Size matters – a system that's too big may result in stored water being too hot, or in excess hot water that needs to be drained.

Heat pump These are very energy efficient so, like solar, attract rebates and other incentives. Installation is similar to that for a standard electric hot water system. Heat pumps draw energy from the surrounding air (so they need to be installed outdoors) and convert it to heat in much the same way as an air conditioner. They work best in warmer climates, but there are models designed for cold areas too. They can be noisy, so make sure they aren't too close to bedrooms or neighbours.

Tank size Your hot water needs depend on your household's usage patterns. As a guide, a four-person household can be supplied by the following tank sizes:

- Electric (day-rate): 125L to 160L
- Electric (off-peak): 250L to 315L
- Gas: 135L to 170L
- Solar: 300L to 360L
- Heat pump: 270L to 315L

INSTANTANEOUS SYSTEMS

These only heat water as and when it's needed, so as long as there's gas or electricity, you'll never run out. Capacity is determined by flowrate in litres per minute (L/min) and depends on the number of hot water outlets the heater has to serve. For a two-bathroom house you typically need a flowrate of about 22-24 L/min. A small house may only need one unit; larger homes might need two or more. Different temperatures can be set for different water outlets – say, 55°C in the kitchen and laundry and 40°C in the bathroom.

Electric models have to be connected to the day-rate tariff, so running costs may be higher than for an off-peak storage system. But as there's no tank to lose heat, they're cheaper to run than day-rate storage heaters. These will be limited from 2012.

Gas models can be installed externally, or internally with a flue. As there are no tank heat losses, they're likely to be cheaper to run than gas storage systems. Most models have a pilot light, but electric ignition is more economical. ■

For more on hot water systems, go to choice.com.au/hotwateroptions

What you'll get back

Solar and heat pump HWS are eligible for Small-scale Technology Certificates (STCs) which replace the old RECs. Generally, the more efficient the system, the more STCs it generates. These can be traded – see the Office of the Renewable Energy Regulator (orer.gov.au) – but usually you assign them to your HWS supplier in exchange for a significant discount on the purchase price. Other federal and state government rebates can also apply. See our website, above, for more.

ISTOCK PHOTO

Dodgy diagnostics

Some alternative diagnostic tests aren't all they're quacked up to be, says **Karina Bray**.

NUTSHELL

- Alternative diagnostic tests may be less invasive than mainstream procedures, but they're also far less effective.
- CHOICE does not recommend any of the tests discussed here.

Feeling tired, bloated, run down, irritable or sluggish? Worried about your body's toxic overload? Chakras out of whack? Suffering from a general lack of wellness?

Unless something's really wrong, you won't get much joy from your GP for these symptoms. But there's always a natural therapist nearby willing to help. They may offer a test – or battery of tests – to find out all that's wrong with you, using everything from whizz-bang machines and prodding body parts, to hair and finger-prick blood tests.

If you're wondering why mainstream medicine doesn't use these astounding techniques and devices that defy laws of physics and physiology, natural therapists may claim it's because science hasn't caught up yet, or medicine is in the grip of evil pharmaceutical companies that don't really want you to get better. After the test, they'll identify certain herbs, "remedies" and supplements that can help you with your newly discovered syndrome/s, and helpfully sell them to you while you're booking in an extensive series of therapy sessions.

Having sat down for an hour with someone prepared to listen to the minute detail of your health concerns, you may already feel better, confident your alternative practitioner understands what's really wrong with you. The question is, do these diagnostic tests actually work? We take a look at some common ones to find out.

Thermography for breast cancer

Women aged over 40 are entitled to free mammograms, and they're recommended every two years for women 50-69 to screen for breast cancer. They're sometimes uncomfortable or even excruciating, and there are some wild assertions they actually cause breast cancer. So, when a natural therapist offers a "safe, accurate and comfortable" alternative screening for women of all ages, it's not surprising women, including younger ones, are interested.

Thermography, also known as thermal breast imaging, measures the temperature of skin on the breast to produce "heat pictures". It's based on the premise that the skin overlying a malignant breast lesion can be warmer than that of surrounding areas. However, according to BreastScreen Australia, studies have shown that the tumour has to be several centimetres in diameter before it can be detected (mammograms can pick them up when they're smaller than 2cm).

As BreastScreen Australia points out, "there is no current scientific evidence to support the use of thermography in the early detection of breast cancer and reduction of mortality". And, for the record, mammography doesn't cause breast cancer.

Live blood analysis

Live blood analysis (also called dark field microscopy, or Hemaview) involves a drop of your blood being placed under a microscope with the image transferred to video screen. By looking at the shape, size and proportions of blood cells and other components, proponents claim they can detect digestive, eliminative and immune issues, "liver sluggishness", the presence of bacteria, fungus and yeast, vitamin deficiencies, "amount of toxicity", and pH and mineral imbalances. A lack of evidence has led the TGA's advertising complaints resolution panel to demand the withdrawal of ads suggesting live blood analysis can be used for diagnosing health problems related to immunity, nutritional deficiencies, stress and free radical damage. Or, as haematologist Professor Hatem Salem says. "The notion that someone can diagnose all sorts of ailments by examining a drop of blood on a video screen is both ridiculous and plain stupid."

> "The notion that someone can diagnose all sorts of ailments by examining a drop of blood on a video screen is plain stupid."

Electro-dermal testing

There are a number of measurement techniques that fall into this category, including bio-impedance analysis (BIA), electro-interstitial scanning (EIS), bioresonance and Vega machines. They all claim to determine your internal physiological status by placing electrodes on your skin and measuring electrical resistance. These devices are used by some naturopaths, chiropractors and other natural therapists, who claim that their machines are able to diagnose both serious and self-limiting health conditions.

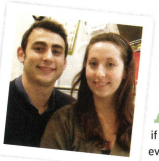
Some say they're "TGA approved", but what this actually means is that the device is (or was) listed with the TGA on the basis that it's reasonably safe – not that it lives up to the grandiose claims that accompany the ad. Reputable scientific research consistently disputes any of the therapeutic claims made for these devices, and this is backed up by expert opinion from both physicists and specialists in immunology and allergies.

- **BIA** is often and correctly used to measure body composition in terms of fat, water and lean body mass, and can be a useful tool for weight management and physical fitness programs – this is the technology used in body fat scales. But some practitioners claim it can measure cell toxicity, inflammation and energy levels, as well as determine your cellular age. Endocrinologist Professor Lesley Campbell says "the claim that BIA can assist in monitoring toxicity, inflammation, malnutrition and poor cellular function is unscientific and unfounded."
- **EIS** is based on measuring and interpreting resistance to the flow of electric current through interstitial fluid (the fluid between the cells) via six electrodes placed on the body. It's claimed the data can be used to assess the health status of all your body's major organs, as well as diagnose ADHD and monitor hyperthyroidism, hypertension, atherosclerosis and depression. Dr Stephen Barrett runs Quackwatch, a US-based organisation that applies scientific methods and principles to establish the validity of alternative health products and services. After consulting scientific and medical literature and speaking with biochemistry experts, he concluded that "EIS has no proven practical value".
- **Vega testing** is often used to detect allergies and food intolerances, by having one electrode placed on your finger, another on an acupuncture point on your hand or your foot and introducing a sealed container of food into the circuit. Reduced electrical current means a sensitivity. However, physicist Professor John Storey notes that "the device simply measures the electrical resistance of the patient's skin. There's nothing in its operation worth discussing, unless one has a particular fascination with the electrical resistance of a person's skin."

ISTOCK PHOTO

Are you paying for dodgy diagnostics?

Most health insurance funds offer extras cover rebates for natural therapies including naturopathy, homeopathy, iridology and other alternative therapies. Even if you don't use them yourself, you're likely to be subsidising someone who is. Some policies offer more cover than others – see our health insurance story on page 16.



Zoya Sheftalovich

- **CHOICE investigative journalist**
- **Lives with her boyfriend Joseph**

A self-confessed bargain shopper, Zoya generally shops to a list but buys in bulk to save money – even if she knows she won't use it all. She cleans out her fridge every two to three weeks and the wastage diary (see right) reflects what she would typically throw out at this time.

"I've actually gotten better, if you can believe it," she says. "I'm really concerned about wastage, so I knew I had a problem. I've been trying to bulk buy less and I haven't been shopping in advance as much as I used to, as fresh food spoiled too much over a whole week. I also try to plan menus better, but that's hard."

Our home economist Fiona Mair says:

Zoya has already made an effort to reduce her waste, which is great, but she's still tossing away a lot of food. She needs to plan out her meals for the week and create a shopping list based on this menu. This way she only buys what she needs.

She also has a storage issue. Foods such as cheese and butter are going dry because they're not wrapped properly and are open to oxidation. She needs to invest in some good quality plastic storage ware. Try storing cheese in cloth to stop it from going dry.

Other things Zoya can do:

- ✓ Freeze leftovers
- ✓ Use leftover wine in recipes such as casseroles or bolognaise or freeze in an icetray for future use in cooking
- ✓ Freeze uneaten bread in a well-sealed bag to stop freezer burn
- ✓ Start a compost for uneaten fruit and vegetables

Zoya says:

Good advice. I find it difficult to plan menus ahead of time as I tend to change my mind about what I want to eat. I know this is something I need to work on, so instead I've started only buying fresh ingredients for a few days in advance. I have to make more shopping trips, but at least I feel less guilty about throwing things away.

I definitely have storage issues – my fridge is old and not working too well. But I'll give the cloth for wrapping cheese a go – hopefully it will stop me from throwing things away. As for a compost bin, I don't know how to compost but I'll just have to learn.

What they threw away

- ***1 bottle red wine*** *that went bad* – $10
- ***mandarin piece*** *that fell on the floor* – 7c
- ***1 takeaway Thai salad*** *that was too spicy* – $8
- ***2 servings of chicken soup*** *that were left in the fridge too long* – $5
- ***½ slice bread*** – 15c
- ***150g prosciutto*** *that they didn't like* – $6.45
- ***250g cheese*** *left from a bulk buy that went dry in the fridge* – $7.50
- ***50g butter*** *that went dry in the fridge* – 28c
- ***75g sprouts*** – $1.10
- ***4 wholemeal lavash*** – $2
- ***25g light sour cream*** *left too long in the fridge* – 12c
- ***a few slices of onion*** *left from a salad* – 8c
- ***½ lemon*** *left in the fridge too long* – 35c
- ***half a jar of minced garlic*** *that she didn't like* – 84c
- ***150g of bocconcini*** *left in the fridge too long* – $2.99
- ***200g light ricotta cheese*** *left in the fridge too long* – $1.59
- ***50g peanut sauce*** – $1
- ***400mL probiotic drink*** *left in the fridge too long* – $3
- ***100mL thickened cream*** *left in fridge too long* – $1.26

Approximate cost of waste:
$51.78 ($3,779.94 per year)

Fiona's tips to cut down your food wastage

BUYING Plan your menu for the week and create a shopping list based on this menu.

- **Check the fridge and cupboard before planning your menu.** You may already have some ingredients that you could use and add to.
- **Avoid two-for-one** and buy-one-get-one-free specials.
- **Don't buy in bulk** unless you're sure you'll use it all.
- **Check best-before and use-by dates.**

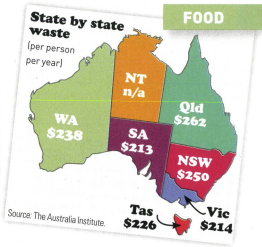
COOKING Consider serving sizes and how much your household eats when preparing meals.

- **Measure the amount of food prior to cooking** to prevent making too much.
- **Use wilting vegetables in soups and casseroles** rather than binning them.
- **Use overripe fruit in desserts** and cakes.
- **Use perishables to make soups, casseroles, curries or pasta sauce before going on holiday** and freeze them for your return.
- **Make croutons from stale bread.** Cut it into pieces and dry-roast in the oven

Narelle Cornelius

- **Market researcher**
- **Lives with her husband Mike and children Jordan, 11, and Ruben, 8**

Feeding two fussy children prevents Narelle from prioritising waste prevention. "My kids don't like eating leftovers," she says. "I cook too much and it sits in the fridge for up to 10 days before being thrown out." Another problem she has identified is school lunch boxes. The kids sometimes come home with a full box and the food has to be thrown away. On the days that she logged her waste, the children ate all their lunch. "Some weeks we waste more, either because of uneaten school lunches or because I decide to clean out the fridge."



Our home economist Fiona Mair says:

It's easier to minimise waste with children than prevent it. If eating leftovers is a problem, Narelle should monitor how much her family eats and make just enough for one meal. Leftovers can be frozen and eaten by her or Mike at a later stage. Frozen leftovers make a convenient lunch to take to work.

As well as encouraging her kids to eat lunch and providing food they like, Narelle could use some insulated lunch boxes. Adding a frozen popper or freezer bricks can help salvage some of the food for the next day. Just be careful with high-risk foods such as meat and salad.

Other things Narelle can do:

- ✓ Make sure she puts food back in the fridge and seals it completely
- ✓ Compost fresh food scraps such as the silverbeet stems and the uneaten cauliflower (see far right)

Narelle says:

I definitely could plan and monitor portion sizes. I often do reuse leftovers for my lunch, and occasionally for the kids' lunches (such as roasts or sausages).

Where possible I have my children eat leftover lunches when they get home. One of my boys, Jordan, won't eat for one of several reasons – not having enough time, not liking it, forgetting to eat it or simply not feeling like eating whatever I've packed that day.

I do try to limit what I put in their lunch boxes (which are insulated) and speak to them regularly about what they like and don't like. I also find out what their friends are eating to get new ideas. I think some children are lunch-eaters and some aren't; I have one of each.

I'll certainly take these ideas on board. ■

What they threw away

- ***½ litre full cream milk*** *left at the bottom of cereal bowls – $1.12*
- ***1 bunch silverbeet stems*** *– $1.99*
- ***250mL soda water*** *that went flat – 38c*
- ***100mL liquid stock*** *left out on the bench overnight – 38c*
- ***20g potato chips*** *that ants got to – 39c*
- ***¼ instant noodle soup*** *that her son didn't finish – 50c*
- ***2 chicken drumsticks*** *left over from dinner – $1*
- ***½ cup cooked cauliflower*** *left over from dinner – 50c*
- ***65g French brie*** *that wasn't ripe enough – $2.60*
- ***1 serving of beef and veg casserole*** *left in the fridge too long – $1.70*

Approximate cost of waste: $10.56 ($770.88 per year)

until golden brown. Store in an airtight container and use within five days.

- **Make your own stock from leftover meat and vegetables**. It can be frozen and used later.
- **Grow your own herbs on the windowsill**. This will save you money and you can pick only what you need.

STORING **Ensure leftovers are put straight in the fridge or freezer.**

- **Keep leftovers at the front of the fridge shelf** so they don't get forgotten.
- **Always read and follow the storage instructions** on products you purchase.
- **Make sure all food is sealed properly**.
- **Do a regular pantry audit** and use items with the shortest dates. This can inspire your menu planning for the week.
- **Know the difference between "use by" and "best before".** Use by means the item must be used by the date stamped; best before foods can be eaten after the date, but the quality may not be as good.

COMPOSTING reduces the amount of garbage that ends up in landfill, and makes great mulch for the garden. Go to choice.com.au/composting for our tips.

Nutshell

- Some probiotics may be of benefit in preventing and treating diarrhoea.
- Probiotics are generally safe and well tolerated, but should be avoided in patients who are severely ill or immunocompromised.

Bug business

With the focus on preventative healthcare at an all-time high, consumers are embracing the benefits of bacteria with open arms, says **Hannah Grew**.

Most often associated with super-bugs and sickness, bacteria's bad-boy image hides their friendlier face. For centuries, "good" bacteria have been used as starter cultures for yoghurts and fermented dairy drinks. Today, beneficial bacteria are in high demand, particularly probiotics.

Probiotics are live microorganisms – such as bacteria and yeasts – which in adequate amounts may have health benefits. Studies have found some can improve digestion, help to protect against disease and enhance immune function. Strains of lactobacillus and bifidobacterium bacteria are most commonly used as probiotics.

Probiotics are most widely available as dietary supplements in tablet, capsule and powder forms, or as a component in yoghurts and fermented dairy drinks. Also gaining a foothold in the market are prebiotics, non-digestible food ingredients that can increase the activity of select "good" bacteria. Prebiotics naturally occur in foods such as bananas, onions, chicory and wholegrains. Savvy marketers spruik their benefits in foods from breads to infant formulas (see Bugs for Babies, far right).

Bug benefits?

In a healthy gut, there's a balance of beneficial and harmful bacteria. Climate, ageing, food, stress, medications and illness can disrupt this balance leading to an excess of "bad" bacteria and possible bloating, gas and constipation.

While individual studies and anecdotal evidence suggest probiotics may provide a range of benefits, uses backed by solid scientific evidence are far fewer. Probiotics may help prevent traveller's diarrhoea and that caused by antibiotics, and are used in the treatment of acute infectious diarrhoea. *Lactobacillus rhamnosus* GG and *Saccharomyces boulardii* strains appear most effective for these conditions, but there

HOW MANY BUGS? CFU PER SERVE

1 Totally Natural Kids Alive Tummy Health 375 million *Lactobacillus acidophilus*, 125 million (total) *Bifidobacterium longum* and *Bifidobacterium bifidum*. **2 Nestle Ski D'lite Yoghurt** 1 billion (total) *B lactis*, *L acidophilus*. **3 Nestle Ski Activ Digestion Yoghurt** 65 million *B animalis lactis* HN10 "Bacillus lactis ProDigestis"

4 Ethical Nutrients Inner Health Plus 12.5 billion *L acidophilus* (NCFM), 12.5 billion *B lactis* (Bi-07). **5 BioCeuticals UltraBiotic 45** 15.55 billion *L rhamnosus*, 9.45 billion *L casei*, 7.4 billion *L acidophilus*, 3.15 billion *L plantarum*, 1.35 billion *L fermentum*, 4.05 billion *B lactis*, 1.35 billion *B breve*, 450 million *B bifidum*, 2.25 billion *Streptococcus thermophilus*. **6 Vaalia Innergy for Immunity probiotic drink** 900 million *L rhamnosus* GG (LGG), 90 million *L acidophilus*, 90 million Bifidobacterium. **7 Yakult** 6.5 billion *L. casei* Shirota. **8 Blackmores Digestive Bio Balance** 200 million *L reuteri* "Protectis" (DSM 17938). **9 Vaalia My First Yoghurt** 75 million *L acidophilus*, 75 million Bifidobacterium, 75 million *L rhamnosus* GG. **10 Jalna Premium Creamy Yoghurt** 600 million (total) *L acidophilus*, Bifidobacterium, *L casei*. **11 Nature's Way Restore Daily Probiotic** 5 billion *L acidophilus*, 5 billion *B lactis*, inulin (prebiotic) 30mg. **12 Vaalia Low Fat Probiotic Yoghurt** 160 million *L acidophilus*, 160 million Bifidobacterium, 160 million *L rhamnosus* GG. **13 Danone Activia Yoghurt** 1.25 billion *B lactis* (DN-173 010) in "Bifidus ActiRegularis".

$28 billion
projected value of the global market for probiotics by 2015 (USD)

100,000 billion
approximate number of microorganisms in the gut

are no formal clinical guidelines for probiotic use. Accredited practising dietitian Milena Katz says a person's gut bacteria are very individual – like a fingerprint – so there's no blanket advice. Katz says it's a case of trial and error and advises her patients with gut problems to try high-strength probiotic capsules over six weeks to see if symptoms improve. Probiotics are generally safe and well tolerated but are not advised for people with severe illnesses or who have compromised immune systems.

When CHOICE asked people about probiotic use, positive messages abounded: "Yakult, every day. No ill effects. Actually think they are part of me beating Crohns". One Inner Health Plus user commented: "I have an irritable bowel and a bloated tummy at the best of times. It helps but has not solved the problem completely".

Name that strain

The type of health benefit, and amount of probiotics needed to achieve this benefit, is strain specific. The International Scientific Association for Probiotics and Prebiotics says a probiotic must be defined at strain level – yet this is often not the case in clinical studies, regulatory records and product advertising. When we hit stores for a product spot check (see below left), we found that many probiotics are sold at the less informative genus (e.g. *Lactobacillus*) or species level (*Lactobacillus casei*).

Companies can also create an entirely new name for their probiotics such as the Bifidus ProDigestis in Nestlé's Ski Activ Digestion Yoghurt or Danone Activa Yoghurt's Bifidus ActiRegularis culture. These trademarked creations appear aligned with the product's claimed health benefits while maintaining a "scientific" tone. Danone lists the scientific name of the strain in their ingredients, but this information is provided only to "health professionals" on the Ski Activ website. While consumers commonly self-prescribe probiotics, and most products are widely available without health practitioner advice, comprehensive product information is often lacking.

Under the Food Standards Code, fermented milk beverages and yoghurts that claim to be probiotic must have a minimum of one million colony-forming units (cfu) of bacteria per gram. But not all manufacturers volunteer this information, which makes it difficult for consumers to make an informed decision.

Claim shame

Overseas, the European Food Safety Authority has rejected all probiotic health claims, often citing insufficient evidence as the reason. In the US, the Federal Trade Commission has sought legal action against both Dannon (Danone in Australia) and Nestlé over misleading claims made about their probiotic products. While not admitting any wrongdoing, Dannon agreed to a US$21 million dollar settlement and softened its claims about two products, DanActive and Activia. Danone recently launched Activia probiotic yoghurt in Australia, which claims to "help improve digestive comfort such as bloated feeling" and spruiks "17 scientific studies on Activia" – none of which can be accessed in full on their website.

In Australia, probiotic products are considered either functional foods and regulated by Food Standards Australia New Zealand (FSANZ), or a complementary medicine and regulated by the Therapeutic Goods Association (TGA). Neither system requires substantiation of health claims prior to being sold. Proof of efficacy for complementary medicines is only required if the product is making high-level health claims or is audited. FSANZ is currently working on a new Nutrition, Health and Related Claims Standard.

CHOICE VERDICT

Health claims on food or complementary medicines should undergo pre-market assessment by the regulators to prevent manufacturers from making misleading or unsubstantiated claims. All probiotic products should name the probiotic bacteria to strain level and disclose the amount in the product to help consumers make informed choices. ■

Bugs for babies

Strains of bifidobacteria and lactobacilli – along with other lactic acid bacteria – are found naturally in breast milk and thought to contribute to normal gut development and function. In newborns, Bifidobacteria make up 95% of the gut's microbial population but this decreases to 25% in adults.

Manufacturers such as Nutricia, which makes infant and toddler formulas, are adding prebiotics to their products. Listed as galacto-oligosaccharides (GOS) and long-chain polyfructose, Nutricia says they are "similar in form and function to the prebiotics found in breast milk" and "assist in digestion and promote softer stools".

A recent report by the American Academy of Pediatrics says there may be some long-term benefit of prebiotics for prevention of atopic eczema and common infections in healthy infants, and while adding probiotics to infant formulas hadn't been shown to be harmful to healthy infants, more evidence is needed to support routine use.

Liquids or powders?

Martha Psiroukis discovers which wash better and are better for our environment.

FRONT LOADERS

TOP LOADERS

In our latest test of clothes detergents, we found powders are still best for general soil and stain removal performance. However, our test is very rigorous as the soil swatches we use are equivalent to old, in-ground stubborn stains. Washing performance will be better on fresh stains, which are what you mostly find in typical laundry.

Liquids have a lower impact on the environment, with most getting good ratings for recycling and grey water reuse. You should find many of the greener liquids further down the tables (opposite and page 40) do a good job of freshening up lightly soiled and coloured clothes. But if you need to wash twice or use a pre-wash or in-wash product for stain removal, you'll negate the liquid's low environmental impact. Stick with top-performing powders for heavier soiling and whites.

For high-efficiency machines that use very little water, a suitable liquid detergent is the best way to avoid detergent residue being left on your clothes. In some cases, a quarter or half dose of a top-performing powder detergent can also do the trick. For best results, look for a detergent with maximum stars for Total Suspended Solids in the tables.

Detergent overdose

We chose some top liquid and powder scorers for general soil removal, and retested them using half their recommended dose. **Omo Small and Mighty Powder With Built-In Pre-Treaters** (Unilever) performed just as well at half dose for general soil and grass stain removal as it did at full dose. Conversely, Trimat (Aldi), Radiant Micro Max (PZ Cussons), and Dynamo (Colgate Palmolive) all did significantly worse at half dose, or about the same where stain removal was already poor.

60%
A general detergency score of this or above means the detergent is likely to do a good job on lightly soiled clothes

6%
For our stain removal scores, a difference of this or above is noticeable to the human eye

WHAT TO BUY

FRONT LOADERS	Costs per wash
Omo Small & Mighty	53c/28c (½ dose)
Omo Ultimate	74c
Drive	48c
Cold Power	42c
Surf Ultra With Essential Oils	29c
Radiant Micro Max	42c
Biozet Attack	24c
Spree Lavender	22c
Liquids	
Dynamo	35c
Seventh Generation	22c
TOP LOADERS	
Trimat (Aldi)	29c
Omo Ultimate	78c
Biozet Attack Airburst	30c
Liquids	
Dynamo	36c
Cold Power	45c
Cold Power Sensitive	48c

Green Buys wash well, are reasonably priced and get at least three stars for recycling and at least two stars for being OK for the garden.

PHOSPHATES Coles, Woolworths and Aldi have committed to removing phosphates from their detergents by 2013, and Unilever has already started rolling out its phosphate-free detergents (look for the NP symbol), though many detergents with no or very low phosphate are already available.

For details on what to look for, using grey water and what makes a detergent OK for your garden or for recycling, go to choice.com.au/detergents.

FRONT LOADERS	PERFORMANCE							SPECIFICATIONS					COSTS			
	Overall dirt removal score (%)	General soil removal score (%)	Grass stain score (%)	Tomato stain score (%)	Waste water recycling	OK for the garden	Total suspended solids	Type	P or NP on packaging	Contains enzymes	Contains optical brighteners	Contact	Size of pack costed (kg)	Number of washes per pack	Packet price ($)	Cost per wash (¢)
Omo Small & Mighty	85	87	79	87	★	★★	★	PC	NP	✓	✓	unilever.com.au	1.0	22	11.57	53
Omo Ultimate	85	86	81	87		★	★	PC	NP	✓	✓	unilever.com.au	1.5	22	16.31	74
Drive	85	86	79	89		★	★★	PC	NP	✓	✓	unilever.com.au	1.0	22	10.52	48
Cold Power (A) (B)	84	86	73	91	★	★	✗✗	PC	P	✓	✓	colgate.com.au	1.0	19	7.99	42
Surf With Essential Oils (C)	84	84	76	91		★★	★★★	PC	NP	✓	✓	unilever.com.au	1.0	22	6.29	29
Radiant Micro Max (A)	83	84	72	92	★		★★★	PC	P	✓	✓	pzcussons.com.au	1.25	25	10.49	42
Biozet Attack (D)	81	82	67	92	★★★★★	★★	★★	PC	NP	✓	✓	biozet.com.au	1.0	25	5.99	24
Spree Lavender (A)	81	82	70	90	★	★	✗	PC	NP	✓	✓	colgate.com.au	2.0	37	7.99	22
Omo Small & Mighty (1/2 dose)	79	85	78	69	★★★	★★★	★	PC	NP	✓	✓	unilever.com.au	1.0	42	11.57	28
Duo Exotic Tiger Lily (A)	75	77	56	90			★★★	PC	NP	✓	✓	pzcussons.com.au	1.2	22	5.82	26
Omo Sensitive Small & Mighty (E)	73	74	59	86	★		★★	PC	P (E)		✓	unilever.com.au	1.0	22	11.57	53
Fab Sunshine Fresh (A)	69	69	54	85		★	✗	PC	NP		✓	colgate.com.au	1.0	18	6.99	39
Dynamo (A)	68	68	58	77	★★★		★★★	LC	P		✓	colgate.com.au	1.0	20	7.00	35
Seventh Generation (A)	67	72	61	62	★★★★★	★★★	★★★	LC	(G)	✓	ns	seventhgeneration.com	1.47	35	7.60	22
Eco Store Lemon	64	64	43	84	★★★★	★★	★★	PC	(G)			ecostore.co.nz	1.0	52	8.49	16
Omo Small and Mighty (A)	63	71	52	58	★★★★★	★★★	★★★	LC	NP	✓	✓	unilever.com.au	0.875	27	11.57	43
Earth Choice	61	64	47	71	★★★★★	★★★	★★★	LC	NP			naturesorganics.com.au	0.75	20	5.99	30
Radiant Micro Max (A)	60	74	44	47	★★★★★	★★★	★★★	LC	NP		✓	pzcussons.com.au	1.0	23	9.99	43
Omo Sensitive Small & Mighty (A)	58	61	49	60	★★★★★	★★★	★★★	LC	NP		✓	unilever.com.au	0.875	27	11.57	43
Hurricane (A)	56	57	42	66	★★★★★	★★★	★★★	LC	NP	ns	✓	colgate.com.au	2.0	30	8.99	30
Radiant Micro Max (1/2 dose) (A)	54	58	51	48	★★★★★	★★★	★★★	LC	NP		✓	pzcussons.com.au	1.25	49	10.49	21
Surf Essential Oils (C)	51	61	41	41	★★★★★	★★★	★★★	LC	NP		✓	unilever.com.au	0.875	27	8.41	31

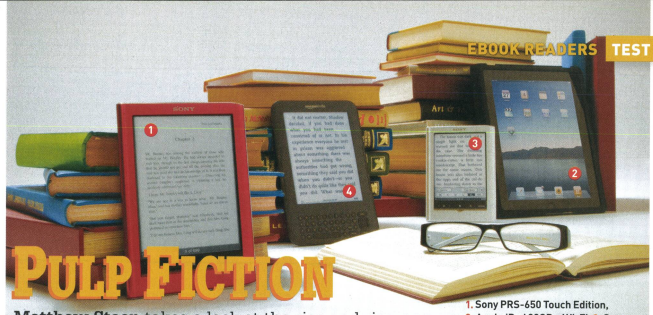
USING THE TABLES **Dirt removal score** is made up of: General soil removal: 50%; Grass stain removal: 25%; Tomato stain removal: 25%. All tests are done in cold water (20°C).
Recycling The lower the total dissolved solids (TDS) the more stars and the better it is for recycling. **5 stars**: ≤5g/wash; **4 stars**: ≤10g/wash; **3 stars**: ≤15g/wash; **2 stars**: ≤20g/wash; **1 star**: ≤30g/wash; **no stars**: >30g/wash. **OK for the garden** It's safe to use just the rinse water from any detergents, but those with stars in this column means the combined wash and rinse water can be used intermittently on a home garden or lawn with an area of 150m2-200m2. **1-star** detergents have low salinity (<2dS/m), sodium (<20g/wash), relatively low pH (<10.8) and low phosphorus (<1g) when diluted with 60L of water for front loading detergents and 120L for top loading ones. **2 stars** – sodium is ≤10g/wash, and **3 stars** – sodium ≤5g/wash and pH≤10. **Total suspended solids** is a measure of the amount of insolubles in the detergent. Choosing one with more stars may leave less residue on your clothes when using a high efficiency machine, which uses very little water. **P or NP on packaging** Phosphates that contain phosphorus help soften the water and keep extracted dirt in suspension. But high levels of phosphorus can lead to excessive growth of blue green algae in inland waterways. **P** means low phosphorus (<7.8 g/wash) and **NP** is for no phosphorus or less than 0.5%. **Enzymes** target protein, starch or biological-based stains such as grass or blood. Different enzymes target different stains. Enzymes are known to cause irritation, so should be avoided by those with sensitive skin. **Optical brighteners** coat the fabric with fluorescers that absorb ultraviolet light and re-emit it as blue light, making the clothes look whiter and brighter even though they don't actually remove any dirt. Products with brighteners are best avoided by people with sensitive skin. **Packet size/number of washes** This is the most popular size we found in stores, and is calculated on the number of washes using the recommended dose for a normal wash (or lightly soiled if there isn't one). **Price** The price we paid for the pack size listed. **TABLE NOTES** **ns** Not stated **na** Not applicable **PC** Powder concentrate. **LC** Liquid concentrate. **L** Liquid. **PS** Powder sachets. **(A)** Claims to be suitable for high water efficiency machines that use less water. **(B)** Has been reformulated since tested – now with different enzyme blend. **(C)** Aroma: tropical flowers & ylang ylang. **(D)** Has been reformulated since we tested – new version has "air burst technology". **(E)** Has been reformulated since we tested, and is now without phosphates (NP). **(F)** Euca says heavy soiling dose of one cap should have been used rather than ¾ cap (light soiling). It's expected to perform better at the higher dose, but the number of washes per pack and cost per wash will increase. **(G)** No NP on label but has no phosphates.

The cost of detergent is your largest ongoing laundry expense, and using a full dose of Omo will cost you about $190 per year washing one load a day, compared with $99 for halving the dose. It also lessens the effects on the environment.

Although we found only one of four detergents performs similarly at half dose, there may be more. Research tells us that most people only partially fill their washing machines, in many cases only to half their capacity. Since many detergent doses are based on a full load, we suggest trying half or even a quarter dose to minimise wastage.

If your machine doesn't have an auto-sensing water level, use a lower water volume as well. ■

TOP LOADERS	PERFORMANCE							SPECIFICATIONS						COSTS			
	Overall dirt removal score (%)	General soil removal score (%)	Grass stain score (%)	Tomato stain score (%)	Waste water recycling	OK for the garden	Total suspended solids	Type	P or NP on packaging	Contains enzymes	Contains optical brighteners	Contact	Size of pack costed (kg)	Number of washes per pack	Packet price ($)	Cost per wash (cents)
Trimat (Aldi)	79	83	65	84			✗	PC	P	✓	✓	aldi.com.au	1.5	21	6.00	29
Omo Ultimate	72	80	61	69		★	✗✗	PC	NP	✓	✓	unilever.com.au	1.5	21	16.31	78
Seventh Generation (A)	68	73	46	79			✗	PC	(G)	✓		seventhgeneration.com	1.36	17	7.60	45
Cold Power (B)	67	78	53	62	★	★	★	PC	P	✓	✓	colgate.com.au	1.0	20	8.99	50
Omo Small & Mighty	67	74	47	73	★	★	✗	PC	NP	✓	✓	unilever.com.au	1.0	21	11.57	55
Biozet Attack Airburst	65	76	42	67	★★★	★★	✗✗	PC	NP	✓	✓	biozet.com.au	2.0	50	14.99	30
Radiant Micro Max	64	77	47	57	★★★		★★	PC	P	✓	✓	pzcussons.com.au	1.0	18	9.99	56
Drive	64	74	38	70		★	★★	PC	NP	✓	✓	unilever.com.au	1.0	24	10.52	44
Dynamo	61	60	40	83	★★★		★★★	LC	P	ns	✓	colgate.com.au	1.0	20	7.29	36
Cold Power	60	60	38	84	★★		★★	LC	P	ns	✓	colgate.com.au	1.0	20	8.99	45
Cold Power Sensitive	60	60	37	83	★★★		★★★	LC	P	ns	✓	colgate.com.au	1.0	21	9.99	48
Trimat (1/2 dose)	59	71	41	56	★★		★★	PC	P	✓	✓	aldi.com.au	1.5	42	6.00	14
Surf With Essential Oils (C)	59	66	38	65	★	★	★★	PC	NP	✓	✓	unilever.com.au	1.0	22	6.29	29
Spree Lavender	59	62	37	76	★	★	✗	PC	NP	✓	✓	colgate.com.au	0.5	10	2.79	28
Radiant Micro Max	59	58	38	81	★★★		★★★	LC	P		✓	pzcussons.com.au	1.25	25	10.49	42
Omo Small & Mighty	59	58	39	83	★★★★★	★★★	★★★	LC	NP	✓	✓	unilever.com.au	0.875	26	11.57	45
Seventh Generation (A)	58	54	42	82	★★★★★	★★★	★★★	LC	(G)	✓	ns	seventhgeneration.com	1.47	35	7.60	22
Duo Exotic Tiger Lily	56	62	35	65			★★★	PC	NP	✓		pzcussons.com.au	1.2	22	5.29	44
Omo Sensitive Small & Mighty (E)	56	60	36	69	★★★		✗	PC	P (E)		✓	unilever.com.au	1.0	21	11.57	55
Surf Essential Oils (C)	54	47	41	81	★★★★★	★★★	★★★	LC	NP		✓	unilever.com.au	0.875	27	8.41	31
Earth Choice	53	47	37	82	★★★★★	★★★	★★★	LC	NP		ns	naturesorganics.com.au	0.75	22	5.99	27
Hurricane Lemon	52	47	33	81	★★★★★	★★★	★★★	LC	NP	ns	ns	colgate.com.au	2.0	31	8.99	29
B.E.E. I'm One Tough Little Squirt	52	47	32	83	★★★★★	★★★	★★★	LC				bee.net.nz	0.5	16	8.70	54
Bosito's Euco Fresh	51	47	32	80	★★★★★	★★★	★★★	L	(G)			fgb.com.au	0.5	10	6.29	61
B.E.E. I Triumph Over Grime & Evil	50	44	43	68	★	★	★★★	PC	(G)	✓		bee.net.nz	1.4	39	16.95	43
Eco Store Lemon	49	51	34	59	★★	★	★	PC	(G)			ecostore.co.nz	1.0	26	8.49	33
Fab Frangipani	48	53	31	55		★	✗	PC	NP	ns	ns	colgate.com.au	1.0	20	6.99	35
Herbon Oil of Eucalyptus	48	42	29	80	★★★★★	★★★	★★★	L	(G)	ns		herbon.com.au	2.0	79	17.65	22
Dynamo (1/2 dose)	45	44	27	66	★★★★★	★★★	★★★	LC	P	ns	✓	colgate.com.au	1.0	40	7.29	18
Euca (F)	44	46	31	53	★★	★★	★★★	PC	(G)			euca.com.au	2.0	73	15.55	21
Eaternal Soapnut	37	37	24	50	★★★★★	★★★	na	PS	(G)			eaternal.com.au	30pk	30	16.20	54



PULP FICTION

Matthew Steen takes a look at the rise and rise of ebook readers.

1. Sony PRS-650 Touch Edition, 2. Apple iPad 32GB + Wi-Fi, 3. Sony PRS-350 Pocket Edition, 4. Kindle Wi-Fi + 3G. See What to Buy (page 42)

NUTSHELL

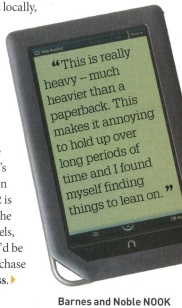
>> Try out an ebook reader extensively before buying, as our triallists found many frustrating.
>> If you decide to upgrade your reader in the future, make sure the upgrade accepts your current ebook file format.

Ebook reader sales are still on the rise, continuing to grow since our last article in *CHOICE* (December/January 2011, page 44). At CHOICE, we don't believe it's a case of this technology taking over the traditional paperback, but rather supplementing it, offering consumers an additional option when it comes to buying books. Ebooks are less expensive than their paperback counterparts in many instances (see below). CHOICE sees the availability of inexpensive ebook readers as one of the ways customers can purchase a wide selection of titles in future.

This may be some time off, given the quality of some readers on test. Our triallists are largely unimpressed by many, with experienced users commenting that some of the new readers seem to be first rather than third generation. Some have lots of extras such as music and video players, but aren't as easy to use as they should be. None of the newly tested readers top our previous What to Buy models (page 42).

Some members asked us to test ebook readers from the US book chain Barnes and Noble. You can't buy books through B&N in Australia, and while books from other sellers can be loaded onto these readers, doing so is fiddly, so only give this a try if you're very technologically savvy. We asked B&N when they will be releasing their readers or ebooks locally, but they didn't get back to us.

We focused on e-ink readers in this test rather than tablets, but included the Apple iPad from our last test in the results (the iBook's ereader application for the new iPad 2 is very similar). Of the newly tested models, triallists said they'd be most likely to purchase the **Kobo Wireless.**


"This is really heavy – much heavier than a paperback. This makes it annoying to hold up over long periods of time and I found myself finding things to lean on."

Barnes and Noble NOOK Color and user comment

iRiver Cover Story and user comment

$30.45 The cost of a bestselling paperback bought through Dymocks Online (delivered, AUD)

$10.65 The cost of the same title bought through bookdepository.co.uk (AUD)

$5.20 The cost of the same title bought as an ebook through amazon.com (USD)

$7.00 The cost of the same title bought as an ebook through booksonboard.com (USD)

WHAT TO BUY

81%
❶ Sony PRS-650 Touch Edition, $299

Good points
- Excellent ease of use.
- Touch-sensitive screen.
- Good removable storage options.
- Extra navigation options with included stylus.

Bad points
- Only OK for night lighting.

78%
❷ Apple iPad 32GB Wi-Fi + 3G, $928

Good points
- Touch-sensitive screen.
- Built-in speakers.
- Text-to-speech feature.
- 32GB internal storage.
- Microphone.

Bad points
- No removable storage.
- Quite large and hard to hold in one hand.

76%
❸ Sony PRS-350 Pocket Edition, $229

Good points
- Touch-sensitive screen.
- Extra navigation options with included stylus.

Bad points
- No removable storage.

	PERFORMANCE						FEATURES											File form	
	Overall score (%)	Ease of use score (%)	Readability score – indoor lighting (%)	Readability score – outdoor lighting (%)	Readability score – night light (%)	Stated recharge (hrs)	Touch screen	Multiple font styles	Text-to-speech	Included stylus	Physical keyboard	Wireless	Built-in speakers	Microphone	Dictionary	EPUB	HTML
Sony PRS-650 Touch Edition	81	91	82	77	63	3	✓			✓		✓			✓	✓	
Apple iPad 32GB Wi-Fi + 3G (A)	78	73	84	72	86	ns	✓	✓	✓			✓	✓	✓	✓	✓	✓
Sony PRS-350 Pocket Edition	76	88	74	72	56	3	✓			✓					✓	✓	
Amazon Kindle Wi-Fi + 3G/ Kindle Wi-Fi D00901 (B)	73	76	75	72	66	4.5			✓		✓	✓	✓	✓	✓		✓
Amazon Kindle DX	71	75	78	67	59	4			✓		✓	3G	✓		✓		✓
iRiver Story	71	90	66	61	50	5					✓		✓	✓		✓	
BeBook Neo	69	83	66	63	52	3	✓	✓		✓		✓			✓	✓	✓
# **Kobo** Wireless	69	64	77	70	70	3		✓				✓			✓	✓	
Pioneer DreamBook Colour Ebook Player W95	68	74	64	59	67	5		✓	✓				✓			✓	✓
# **Bookeen** Cybook Orizon	67	76	64	61	56	5	✓	✓				✓+BT				✓	✓
# **Pico** Life BK7002	67	79	62	56	60	6										✓	
# **BeBook** Club	66	80	60	58	50	3			✓							✓	✓
Eco Reader	66	86	55	55	48	3		✓								✓	✓
# **Barnes and Noble** Nook Wi-Fi	65	66	69	65	61	3.5		✓				✓	✓		✓	✓	
BeBook Mini	65	86	52	57	46	3		✓	✓							✓	✓
Stash W950	62	72	56	50	60	4							✓			✓	✓
# **Hanvon** WiseReader N526	61	65	60	59	56	4	✓	✓		✓	✓		✓	✓		✓	✓
# **Kogan** 6"	61	79	49	54	44	ns		✓								✓	✓
# **Elonex**	60	70	54	58	49	4		✓							✓	✓	✓
# **Barnes and Noble** NOOK Color	59	58	62	53	63	3.5	✓	✓				✓	✓		✓	✓	✓
# **MiGear** TFT Colour	59	73	51	45	52	ns							✓			✓	✓
Hanvon N516	58	64	56	59	49	4			✓				✓	✓		✓	✓
# **Bookeen** Cybook Opus	55	64	49	50	46	ns		✓								✓	✓
# **iRiver** Cover Story	55	71	46	47	41	5	✓			✓			✓	✓	✓	✓	

USING THE TABLE Scores The overall score is made up of: Ease of use: 40%; Readability – normal indoor lighting: 20%, normal outdoor lighting: 20%; Normal bedroom night lighting: 20%. **Multiple font types** allows you to alter the typeface. **Price** Recommended retail, as of April 2011. **TABLE NOTES** All ebook readers by default ship with an electronic version of the manual available on the device. **#** Newly tested models. **(A)** Discontinued, but differences between the Apple iPad and Apple iPad 2 iBooks application are marginal so they can be compared. **(B)** The Kindle Wi-Fi + 3G is identical to the Kindle Wi-Fi D00901. A couple of minor differences are noted in the table.

73%
4 Kindle Wi-Fi + 3G, $189

Good points

- Wi-Fi and 3G for downloading books.
- Built-in speakers.
- Text-to-speech feature.
- 4GB internal storage.
- Microphone.

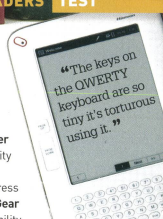
Bad points

- No removable storage.

ABOUT THE REST

Of the newly tested models, all have at least 7000 page turns, or up to eight hours of battery life. You can also expand the memory of all of them. The **Pico Life BK7002** and the **MiGear** have the fewest features. The **Barnes and Noble NOOK Color** had the poorest ease of use; most of the others are OK or good, apart from the **BeBook Club,** which is very good.

The **Kobo Wireless** is the ebook reader most triallists would consider purchasing and the **Kogan** the least likely to be considered. The Kobo, **Elonex** and **Bookeen Cybook Opus** are the lightest, and the NOOK Color is the heaviest at about 400g. The **iRiver Cover Story**'s poor readability in different light conditions didn't impress our triallists. The **MiGear** has the lowest readability score outdoors, while the **Bookeen Orizon**, **B&N Wi-Fi** and **Hanvon N526** are OK overall, just not as good as the top scorers.



Hanvon WiseReader N526 and user comment

CIFICATIONS

Power options	Resolution	Grayscale levels	Internal storage capacity (GB)	Removable storage	Weight (g)	Dimensions (mm, H x W x D)	Contact	Price ($)
USB	800 x 600	16	2	SD & MS	211	168 x 119 x 10	sony.com.au	299
PA	1024 x 768	(C)	32	None	730	243 x 190 x 13	apple.com.au	928
USB	800 x 600	16	2	None	154	145 x 104 x 9	sony.com.au	229
USB	600 x 800	16	4	None	232/222	190 x 123 x 9	amazon.com	189/139
USB	1200 x 824	16	4	None	542	264 x 182 x 9	amazon.com	379
USB	600 x 800	8	2	SD	284	203 x 127 x 9	iriver.com.au	399
USB	600 x 800	16	0.5	SD	308	196 x 121 x 11	bebook.net.au	449
USB	800 x 600	16	1	SD	196	184 x 120 x 12	kobeereader.com	179
USB	800 x 480	(C)	2	Micro SD	179	149 x 104 x 11	pioneer.net.au	129
USB	600 x 800	16	2	Micro SD	248	189 x 125 x 8	bookeen.com	319
USB	480 x 800	(C)	2	SD	363	206 x 133 x 14	pico-life.com.au	200
USB	600 x 800	8	0.5	SD	275	197 x 124 x 12	mybebook.com	249
USB	600 x 800	4	0.5	SD	220	184 x 120 x 10	ecoreader.com.au	200
USB, PA	600 x 800	16	1.3	Micro SD	321	196 x 126 x 13	bn.com	149 (D)
USB	600 x 800	8	0.5	SD	165	151 x 105 x 10	bebook.net.au	189
USB, PA	800 x 480	(C)	2	SD	189	149 x 104 x 11	pico-life.com.au	129
USB, PA	600 x 800	8	Nil	Micro SD	204	174 x 117 x 11	hanvon.com	297
USB, PA	600 x 800	16	2	SD	217	178 x 128 x 10	kogan.com.au	189
USB	600 x 800	16	1	SD	187	186 x 121 x 11	elonex.com	239
USB, PA	600 x 1024	(C)	5	Micro SD	440	205 x 127 x 12	bn.com	249 (D)
USB	480 x 800	(C)	2	Micro SD	294	206 x 133 x 12	migear.biz	129
USB, PA	800 x 600	8	2	SD	169	152 x 108 x 12	hanvon.com	199
USB	600 x 800	4	1	Micro SD	141	152 x 98 x 12	bookeen.com	269
USB	600 x 800	8	2	SD	232	162 x 126 x 12	iriver.com	430

Colour screen. **(D)** US dollars. **ns** not stated. **File formats supported** All models support PDF. The iPad, Barnes and Noble NOOK Color, o Life BK7002, Stash and DreamBook offer support for some video file formats. **PA** Power adapter. **Landscape/portrait mode** All models port this except for the BeBook Club, Hanvon WiseReader and MiGear.

WHAT TO LOOK FOR

Accessories An AC adapter provides more flexibility for charging than a USB cable; this may be an optional extra.

Controls Hold the reader as if you were reading a book and see if the buttons are in the right place for you. Also go through the menus to see how easy it is to access the reader's features.

Connectivity Some readers connect to the internet wirelessly to download books. Some also have 3G capability, allowing you to download books wherever you are.

Document file formats Check ebook stores to find out the format of the books you want. Also check if these are locked with digital rights management (DRM). The most common format is EPUB. Adobe PDF is also popular; however, resizing the font in this format can be difficult or impossible. All the newly tested models support Adobe Digital Editions (ADE), a DRM program used by ebook vendors.

Memory capacity All on test have SD or microSD memory card slots except the Kindles, Sony 350 and iPad.

Screen size. Our test includes a range of sizes from 5"-7", as well as the Kindle DX and Apple iPad with 9.7" screens, which some panellists found too big and unwieldy.

Nutshell

- *Smartphones that multi-task are now the most popular mobile choice.*
- *Check that your next mobile will work well with your phone's network.*

Your life in your pocket

Mobile phones are getting even smarter, as **Denis Gallagher** discovers.

When choosing your next mobile phone, you'll need to consider a number of factors such as the handset features, operating system (OS) and phone network support – and, most importantly, the price or plan. The OS in your phone has become increasingly important, as the modern mobile is used not only for making calls but also as a music player, office tool and even personal navigator.

While the Apple iPhone is by far the most popular smartphone, Google's Android is now the most widely used OS, with one in three smartphones using Android and a range of basic Android phones available. The only major companies not using Android are Nokia, Apple and BlackBerry.

The table (page 46) shows which phones are best for internet browsing, email and camera performance as well as which have a keyboard, touchscreen or combination of both. If you're committed to Optus or Telstra, you should also check which phone works best on your network using either 850MHz for Telstra or 900MHz for Optus.

Constantly connected

Most new mobiles have Wi-Fi, allowing you to connect to a wireless home network to surf the web, download songs or check email using your net connection. You may even find you use your home computer or laptop less, as your phone can be the perfect tool for online tasks that require a simple read-and-confirm-action such as banking .

Symbian holding Nokia back

Nokia has sold more phones than any other manufacturer and still makes very good handsets, as the E7 and N8 models prove. Among the top performers as a music player and still camera with eight megapixels and Xenon flash, the N8 also performs well as an HD video camera, with high resolution and front-facing camera. However, the Symbian OS is falling behind Apple's iPhone 4.3 and Android 2.3 in terms of features and online application support, seriously hampering the handset's versatility. Nokia has announced that future models will use Windows Phone 7, with the first Nokia Windows mobiles expected by the end of the year.

SAR

All mobiles on test comfortably meet the Australian specific absorption rate (SAR) requirements. But the World Health Organization recently refused to rule out that mobile use was possibly carcinogenic, so you may want to consider a phone with a lower SAR figure

Affordable options

Although some of the lower-priced phones are not among our top-scorers, models such as the Samsung Galaxy 5 would make a good first phone for the kids or a backup, particularly if you buy it outright and use a prepaid SIM. ▸

WHAT TO BUY

Equal best overall

77%
Apple iPhone 4 (white), $859

The white iPhone 4 is the same as the black model CHOICE recently tested, although we tested it tested with the latest 4.3.3 software. An excellent display, front-facing camera and easy-to-use touchscreen help explain why the iPhone has helped redefine the phone market, with easily selectable apps and smooth, effortless online access.

Reception performance on standard 3G networks is not as good as for other models on test, and GPS performance with included Google Maps is not as strong as most of the other phones. But as with all things Apple, any application shortcomings can be fixed with a visit to the online App Store.

Equal best overall

77%
HTC Incredible S, $699

The rise of Google Android as the operating system of choice for non-Apple phones continues at a phenomenal rate, with HTC releasing a seemingly endless range of Android-based mobiles.

The Incredible S has a contoured back, very good handling and excellent email performance. Social networking and multimedia features such as HD video and a front-facing camera make this good for work and play. Although the available internal storage is less than 1GB, you can use a microSD card to add up to 32GB.

Touchscreen & keyboard

76%
HTC Desire Z, $799

The Desire delivers the best of both worlds, with a 3.7" touchscreen and a QWERTY keyboard that slides out to create a surprisingly effective mini-computer. Although it's the heaviest phone on test, the Desire Z will still slip into most pockets.

You can text, email or control your social networking life using either the touchscreen or keyboard. As with the other top-scoring phones, you can also use it as a modem in tethering mode to access the net on your laptop or share your connection with other mobile phones.

Biggest screen

75%
HTC Desire HD, $899

If you use your phone as a multimedia device for watching movies and working on documents, you may want to consider the Desire HD, whose 4.3" screen is the largest on test. The battery delivers good standby and reasonable in-use performance considering the screen size.

The Desire HD delivers good still photos using its eight megapixel camera, and although video quality is reasonable, its lower screen resolution compared with the iPhone 4 becomes apparent when watching HD video.

NFC

Near Field Communication (NFC) is a chip that turns your phone into a credit or debit card. Simply wave your phone near the reader at the retail counter and you've made a cashless purchase. For now, only the Samsung Google Nexus S phone has this feature, but in time we expect more will have one

		PERFORMANCE															FEATURES					
	Overall score (%)	Internet score (%)	Calling score (%)	Email score (%)	Camera score (%)	Music score (%)	Video score (%)	Reception score (%)	Handling score (%)	Touchscreen score (%)	Battery score (%)	GPS score (%)	Computer sync score (%)	SMS score (%)	Display score (%)	Durability score (%)	Physical QWERTY keyboard	Wi-LAN 802.11 n	Tethering	Second camera at front	HD video capture	Memory card (microSD)
Apple iPhone 4 (white)	77	73	78	92	77	76	73	42	76	87	91	54	72	83	92	85		✓	✓	✓	✓	
HTC Incredible S	77	77	77	92	69	77	63	65	88	79	70	74	82	77	79	79		✓	✓	✓	✓	✓
HTC Desire Z	76	75	80	92	70	78	56	56	86	84	72	72	82	82	78	72	✓	✓	✓		✓	✓
HTC Desire HD	75	75	78	86	73	76	53	67	89	79	58	72	82	83	81	61		✓	✓		✓	✓
LG Optimus 2x Speed	72	68	79	84	56	69	68	54	69	92	79	69	82	70	80	75		✓	✓	✓	✓	✓
Nokia E7	72	53	75	87	66	79	76	48	80	92	82	72	58	81	77	74	✓	✓	✓	✓	✓	
Samsung Google Nexus S	72	67	74	86	63	71	47	55	84	92	79	66	82	77	83	75		✓	✓	✓		
Nokia N8	71	52	75	71	85	84	83	48	75	84	70	71	58	77	78	70		✓	✓	✓	✓	✓
BlackBerry Torch 9800	70	54	76	81	73	73	64	52	70	66	89	66	76	68	81	77	✓	✓	✓			✓
LG Optimus 7	69	62	67	86	63	68	67	70	73	87	74	50	68	70	74	72		✓			✓	
Samsung Omnia 7	69	63	66	86	69	69	63	63	74	87	64	53	68	70	85	34		✓			✓	
HTC Legend	68	64	74	78	56	72	42	60	73	84	71	66	82	65	70	66			✓			✓
Motorola Defy	68	66	77	75	53	70	51	56	69	76	69	70	82	66	73	88		✓	✓			✓
HTC 7 Trophy	67	57	64	86	59	68	47	64	75	87	70	51	68	70	81	72		✓			✓	
Nokia C7	67	48	76	70	64	70	62	60	72	76	84	74	58	74	79	80		✓	✓	✓	✓	✓
HTC HD7	66	55	65	86	71	63	42	67	77	87	64	47	64	60	81	79		✓			✓	
Nokia C6-01	66	49	72	64	61	72	69	63	68	76	83	66	58	74	71	73		✓	✓	✓	✓	✓
BlackBerry Bold 9780	65	54	68	81	66	72	56	59	67	na	76	54	76	63	78	30	✓		✓			✓
LG Optimus One	64	60	76	73	44	66	44	61	55	60	78	62	82	54	76	73			✓			✓
Samsung Galaxy 5	64	54	73	76	54	60	37	64	62	74	75	65	82	68	55	77			✓			✓
BlackBerry Curve 9300	63	47	66	81	51	71	45	51	66	na	81	62	76	63	68	67	✓	✓	✓			✓
Sony Ericsson Xperia X8	61	54	71	65	51	63	34	67	49	50	78	63	82	57	61	75				✓		✓
Nokia E5	60	41	69	57	51	72	46	75	56	na	91	63	58	69	53	68	✓		✓	✓		✓
Samsung Wave 723	58	55	71	59	50	70	35	68	45	47	81	40	52	58	62	63		✓	✓			✓
Motorola Flipout	57	46	69	62	35	65	36	39	58	71	84	53	82	51	48	74	✓	✓				✓
Nokia C5-03	55	32	72	67	36	67	42	51	57	45	82	60	58	65	57	63			✓			✓

USING THE TABLE Scores The overall score is made up: Internet: 15%; Calling: 10.5%; Email: 10%; Camera: 10%; Music: 10%; Video: 5%; Reception: 5%; Handling: 5%; Touchscreen: 5%; Battery 5%; GPS 5%; Computer sync: 5%; SMS: 4.5%; Display 2.5%; Durability: 2.5%. **Price** Recommended retail, as of June 2011. You can get most of these phones for a lot less by shopping around. **TABLE NOTES na** Not applicable.

SPECIFICATIONS

	Operating system	Display diagonal (inches)	Display resolution (pixels)	Internal storage (GB)	SAR certification (W/kg)	Weight (g)	Contact	Price ($)
D	iOS 4.3.3	3.5	640 x 960	14.0	0.93	140	apple.com.au	859
D	Android 2.2.1	3.9	480 x 800	0.8	0.88	135	htc.com/au	699
D	Android 2.2.1	3.7	400 x 800	0.5	0.86	185	htc.com/au	799
D	Android 2.2	4.3	480 x 800	1.5	0.83	165	htc.com/au	899
D	Android 2.2.2	4.0	480 x 800	5.5	0.55	146	lge.com.au	999
D	Symbian 3	4.0	360 x 640	16.0	0.56	177	nokia.com.au	899
D	Android 2.3.1	3.9	480 x 800	16.0	0.47	130	samsung.com.au	699
ion	Symbian 3	3.5	640 x 360	16.0	1.02	135	nokia.com.au	639
D	BlackBerry 6	3.2	360 x 480	4.0	0.91	160	blackberry.com/au	869
D	Windows Phone 7	3.9	480 x 800	14.0	0.94	158	lge.com.au	799
D	Windows Phone 7	3.9	480 x 800	16.0	0.65	139	samsung.com.au	799
D	Android 2.1	3.2	320 x 480	0.4	0.57	124	htc.com/au	699
D	Android 2.1	3.7	480 x 854	0.5	1.18	112	motorola.com.au	799
D	Windows Phone 7	3.8	480 x 800	8.0	0.65	137	htc.com/au	699
D	Symbian 3	3.5	640 x 360	8.0	0.73	131	nokia.com.au	549
D	Windows Phone 7	4.0	480 x 800	14.0	1.21	161	htc.com/au	799
D	Symbian 3	3.2	360 x 640	0.34	1.03	133	nokia.com.au	239
D	BlackBerry 6	2.4	480 x 360	0.3	1.15	118	blackberry.com/au	899
	Android 2.2	3.3	320 x 480	0.14	0.93	131	lge.com.au	499
	Android 2.1	2.8	320 x 240	–	0.65	106	samsung.com.au	299
	BlackBerry 5	2.4	320 x 240	0.3	1.45	105	blackberry.com/au	459
	Android 1.6	3.0	320 x 480	–	0.84	106	sonyericsson.com.au	399
ED	Symbian S60 (3rd)	2.4	320 x 240	0.3	0.88	125	nokia.com.au	239
ED	Bada 1.1	3.2	240 x 400	–	0.97	101	samsung.com.au	499
	Android 2.1	2.8	320 x 240	0.5	0.52	125	motorola.com.au	279
	S60 (5th)	3.1	360 x 640	–	1.36	94	nokia.com.au	299

phones on test have a 3.5mm headset socket; USB PC connection that can also charge the phone; a single display; quad band SM support as well as support for the 2100MHz 3G band and hands-free talk mode.

WHAT TO LOOK FOR

GPS All phones on test have a GPS chip and provide support for online map services such as Google Maps, but an app with maps stored on the phone gets you from A to B without having to use your network. Most Nokia phones include a free GPS application from Navteq, while other makers such as HTC include full version apps in their phones. If you own an iPhone or Android phone, you can buy a car GPS app from their online store.

Wi-Fi All models support the b and g speeds, with some supporting the faster n speeds.

A **front-facing camera** allows for video conferencing when connected to another phone user or computer user with webcam.

Flight mode turns off the calling capabilities of your mobile, turning it into a music or video player and allowing you to use it during a flight. All phones on this test have this feature.

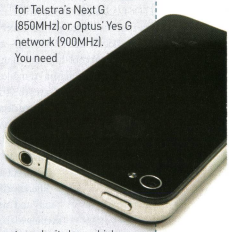
Headphone connection type A phone with a 2.5mm or 3.5mm jack allows you to use a standard set of headphones to listen to music.

A **memory card** is good for storing photos, video and music. All phones on test that support removable memory use microSD cards.

A **capacitive touchscreen**, made popular on the Apple iPhone, operates by recognising the touch of a finger without you needing to apply significant pressure. This touchscreen works particularly well when swiping the finger to make a selection or using multiple finger selections such as zooming in on a web page. The alternative is a **resistive touchscreen**, which works well with a stylus or finger but requires more pressure. Most of the latest smartphones use a capacitive touchscreen.

A **QWERTY keyboard** may be available as a virtual keyboard showing up on the mobile's touchscreen, while a physical keyboard is shown as an extended keypad or slide-out.

Network Many of the phones on test offer a model that is optimised for Telstra's Next G (850MHz) or Optus' Yes G network (900MHz). You need



to make it clear which version you want before buying, as often there are two versions of the same model. If you have a plan with another carrier, all you need is support for 3G at 2100MHz.

		Freezer	Number of doors	PERFORMANCE Overall score (%)	Temperature performance (%)	Fluctuation score (%)	Range score (%)	Uniformity score (%)	Ambient change score (%)	Recommended setting score (%)	Energy efficiency score (%)	Claimed / measured energy use (kWh / year)	Noise level (dB)	FEATURES Chiller	Crisper drawer	Dairy
< 300L	# **Westinghouse** WTB2500WB	Top	2	70	67	80	70	75	33	80	82	415 / 403	33	✓	1	✓
	Mitsubishi MR-260B-W-A	Top	2	68	64	50	75	65	66	75	83	425 / 400	34	✓	1	
	Westinghouse WTB2300WB-XAU	Top	2	67	63	80	70	60	29	80	81	411 / 403	39	✓	1	✓
	# **Whirlpool** WRI21UW	Top	2	61	56	45	85	65	22	80	83	415 / 372	42	✓	1	
	# **Mitsubishi** MR-C375B-ST-A	Bottom	3	57	52	40	45	50	81	60	79	500 / 470	30	✓	1	
SMALL (300L–380L)	**Fisher & Paykel** E381T	Top	2	79	77	60	80	85	90	80	85	433 / 424	35		1	✓
	Westinghouse WBM3700WB	Bottom	2	76	74	65	90	75	67	70	82	495 / 481	38		1	✓
	Fisher & Paykel E372B	Bottom	2	74	72	50	85	70	85	85	82	498 / 482	35		2	✓
	# **Samsung** SR364MW	Top	2	70	66	60	70	70	66	70	84	450 / 434	39	✓	1	
	# **Haier** HTMR315SS	Top	2	68	65	65	75	45	66	85	81	454 / 467	41	✓	1	
	# **Sharp** SJ308S-SL	Top	2	67	63	70	75	65	34	75	83	414 / 420	36		1	
MEDIUM (381L–450L)	**Fisher & Paykel** E442B	Bottom	2	78	78	60	90	85	81	85	79	563 / 573	30		2	✓
	Fisher & Paykel E406B	Bottom	2	76	76	65	90	60	90	80	78	564 / 559	30		2	✓
	Fisher & Paykel E440T	Top	2	74	72	50	85	80	77	85	83	488 / 494	30		1	✓
	Fisher & Paykel E402B	Bottom	2	73	72	60	85	65	80	80	78	528 / 561	35		2	✓
	Electrolux ETM4407SC	Top	2	72	68	75	90	65	33	70	90	369 / 353	37		1	✓
	Kelvinator KTM4400WB	Top	2	72	69	65	90	70	45	80	84	486 / 464	41		1	✓
	Westinghouse WBM4300WB	Bottom	2	72	70	75	85	55	66	50	81	530 / 529	37		1	✓
	Kelvinator KBM4300WB	Bottom	2	71	69	80	65	85	53	30	78	565 / 580	39		1	✓
	Kelvinator KTM3900WB-R	Top	2	70	67	50	90	80	50	75	82	463 / 477	34		1	✓
LARGE (451L–525L)	**Fisher & Paykel** E521T	Top	2	78	76	60	85	85	77	80	85	508 / 496	35		1	✓
	Westinghouse WBM5100WB	Bottom	2	76	74	75	85	70	65	55	84	560 / 526	39		2	✓
	Electrolux EBM5100SC	Bottom	2	74	70	70	80	65	62	80	89	428 / 401	34		2	✓
	# **Electrolux** EBM5107SC	Bottom	2	74	71	70	75	65	70	70	88	428 / 422	32	✓	2	✓
	Kelvinator KBM5100MB	Bottom	2	74	72	80	70	80	57	60	81	589 / 593	38		2	✓
	Bosch KGN53X70AU/08	Bottom	2	73	70	80	75	70	53	60	83	505 / 490	37	✓	2	
	Fisher & Paykel E522BRXFDU	Bottom	2	72	70	55	85	70	77	50	79	636 / 627	34		2	✓
	Fisher & Paykel E522B	Bottom	2	71	69	60	80	50	87	80	78	596 / 642	37		2	✓
	# **Kelvinator** KTM5200MB	Top	2	68	64	80	60	70	44	50	82	518 / 556	33		2	✓
> 526L & FD	**Haier** HTD647AS	Bottom	3	79	79	90	75	80	65	90	80	690 / 698	38	✓	2	✓
	Fisher & Paykel RF610A	Bottom	3	78	78	70	80	80	83	85	79	695 / 688	37		2	✓
	Electrolux EQE6007SB-NAU	Bottom	4	70	67	40	85	90	85	70	84	616 / 661	34	✓	2	✓
	# **Electrolux** EHE5107SA	Bottom	3	63	58	45	90	50	47	50	82	555 / 551	34	✓	2	✓
SIDE-BY-SIDES	**Westinghouse** WSE6100WA	Left	2	77	76	75	80	60	90	75	79	687 / 705	41		2	✓
	Bosch KAN56V10AU (A)	Left	2	75	73	60	80	80	75	85	82	630 / 636	37		2	✓
	LG GC-L197STF	Left	2	75	74	70	80	70	76	70	81	638 / 645	33		2	✓
	Daewoo FRS-U20ICW	Left	2	74	72	60	80	75	74	90	81	650 / 665	38	(C)	2	✓
	Bosch KAN58A40AU (B)	Left	2	72	71	70	70	70	70	90	74	750 / 758	38		1	✓
	# **Haier** HSBS562IS	Left	2	69	69	85	50	60	88	35	70	743 / 771	39		1	✓
	# **Samsung** SRS684GDHSS	Left	2	67	65	35	90	60	85	65	76	847 / 786	37		3	✓
	Smeg SR650XA	Left	2	66	63	70	40	80	64	60	77	760 / 726	38		1	✓
	# **LG** GR-L247DPSL	Left	2	64	60	45	85	50	58	80	82	685 / 679	34		3	✓

	SPECIFICATIONS								COSTS	
positions	Rollers	All shelves removable at 90°	Door hinge position	Dimensions (mm, H x W x D)	Claimed total volume (L)	Claimed volume, fresh food (L)	Claimed volume, freezer (L)	Contact	10-year running costs ($)	Price ($)
		✓	Rev	1491 x 542 x 620	246	167	79	westinghouse.com.au	806	739
		✓	R	1592 x 555 x 654	260	185	75	mitsubishielectric.com.au	800	912
			Rev	1589 x 542 x 620	230	161	65	westinghouse.com.au	806	689
	✓	✓	Rev	1450 x 560 x 670	212	149	63	whirlpool.com.au	744	499
	✓	✓	R	1678 x 600 x 656	276	272	103	mitsubishielectric.com.au	940	1250
	✓	✓	Rev	1595 x 635 x 712	380	283	97	fp.com.au	848	1149
	✓		R or L	1620 x 652 x 709	365	243	122	westinghouse.com.au	962	1269
	✓	✓	R or L	1595 x 635 x 736	373	250	123	fp.com.au	964	1399
			R	1687 x 670 x 660	365	245	120	samsung.com.au	868	949
		✓	R	1525 x 610 x 675	315	218	97	haierappliances.com.au	934	999
		✓	R	1580 x 600 x 631	308	211	97	sharp.net.au	840	934
	✓		R	1695 x 680 x 730	442	307	135	fp.com.au	1146	1949
	✓		R or L	1595 x 680 x 736	404	271	133	fp.com.au	1118	1649
	✓		R or L	1695 x 680 x 734	447	342	105	fp.com.au	988	1649
	✓		R or L	1695 x 635 x 730	403	280	123	fp.com.au	1122	1649
	✓		R or L	1720 x 700 x 745	442	339	103	electrolux.com.au	706	2589
	✓		R or L	1720 x 703 x 703	431	300	131	kelvinator.com.au	928	1219
	✓		R or L	1720 x 703 x 709	431	300	131	westinghouse.com.au	1058	1529
	✓	✓	R or L	1720 x 703 x 703	442	339	103	kelvinator.com.au	1160	1319
	✓		R or L	1720 x 703 x 641	390	302	91	kelvinator.com.au	954	1009
	✓		R or L	1695 x 790 x 734	517	400	117	fp.com.au	992	1869
	✓		R or L	1720 x 803 x 709	504	348	156	westinghouse.com.au	1052	1899
	✓	✓	R or L	1720 x 803 x 745	510	349	156	electrolux.com.au	802	2379
	✓		R	1702 x 790 x 612	505	349	156	electrolux.com.au	844	2849
	✓	✓	R or L	1720 x 803 x 703	505	349	156	kelvinator.com.au	1186	1799
	✓		Rev	1700 x 700 x 750	451	332	119	bosch-home.com.au	980	1899
	✓	✓	R	1700 x 790 x 736	519	360	159	fp.com.au	1254	2829
	✓	✓	R or L	1700 x 790 x 736	519	360	159	fp.com.au	1284	2059
	✓	✓	R	1702 x 790 x 612	518	396	122	kelvinator.com.au	1112	1589
(D)	✓	✓	na	1770 x 910 x 710	647	423	211	haierappliances.com.au	1396	2149
	✓		na	1780 x 900 x 730	614	433	181	fp.com.au	1376	3599
	✓	✓	na	1720 x 890 x 818	602	370	232	electrolux.com.au	1322	3699
			na	1702 x 790 x 612	505	349	156	electrolux.com.au	1102	2739
	✓		na	1754 x 898 x 741	606	357	249	westinghouse.com.au	1410	1899
	✓		na	1800 x 903 x 733	618	377	241	bosch-home.com.au	1272	2049
	✓		na	1758 x 894 x 690	567	353	214	lge.com.au	1050	2199
	✓		na	1790 x 895 x 730	618	377	241	daewooelectronics.com.au	1330	1499
	✓		na	1800 x 903 x 733	603	377	226	bosch-home.com.au	1516	2999
	✓	✓	na	1768 x 890 x 770	560	348	212	haierappliances.com.au	1548	2499
	✓		na	1780 x 912 x 737	684	429	255	samsung.com.au	1572	3499
	✓		na	1795 x 900 x 681	603	377	226	smeg.com.au	1452	2790
	✓		na	1785 x 910 x 788	693	428	265	lge.com.au	1358	2699

USING THE TABLE

Scores The overall score is made up of:
Temperature performance: 80%
Energy efficiency: 20%.

Temperature performance This score is made up of:
Fluctuations: 30%;
Range: 25%;
Uniformity: 20%;
Ambient change: 20%;
Recommended setting: 5%.

Features see *CHOICE*, December 2010/January 2011, What to Look For, page 70.

Energy efficiency is based on the fridge's energy consumption, taking into account its size.

Noise level These are comparative measurements taken 1m up and 1m away from the fridge during normal running. Fridges can sound noticeably louder as the compressor starts and stops and may make unusual noises during automatic defrosting.

Claimed volumes This is how much air space the fridge has to cool; less space is available for storage. Use the volumes to get an idea of how big the freezer is compared with the fresh-food compartment.

10-year running costs are calculated at a rate of 20c per kWh. A 10-year period gives a useful indication of the long-term differences between high and low energy use – and you should expect your fridge to last at least this long.

Price Recommended retail, as of June 2011. Many fridges are available in other styles and finishes, at a different price. Some can also be built into cabinets with a door kit that matches your kitchen cupboards.

TABLE NOTES

Newly tested model.
na Not applicable – doors are side-by-side.
Rev Reversible door.
(A) The Bosch KAN56V40AU ($2249) is technically similar and is expected to perform the same.
(B) The Bosch KAN58A70AU ($3499) is technically similar and is expected to perform the same.
(C) This chiller was too warm in our tests for optimal storage of highly perishable foods.
(D) Four half-width shelves.

choice shopper

For the best deal, call CHOICE Shopper, 1300 360 655, with the model name and number, the price you want to beat and your CHOICE personal subscriber number. The full range of models on test may not be available in all states.

ISTOCKPHOTO

WHAT TO BUY

Power meters help you identify energy-hungry appliances

86%
Clipsal Ezaudit Power Usage Meter 10A, $275

Good points
- Very accurately records high and standby loads.
- Display can be read away from the socket as it has a cable.

Bad points
- Values displayed don't appear on the screen at the same time as their unit of measurement.
- Comparatively expensive.

85%
CCI Power Mate Lite PML10A, $130

Good points
- Very accurately records high loads.
- Very accurately records standby loads.
- Display can be read away from the socket as it has a cable.
- All values can be displayed at once.
- Very good instructions.

Bad points
- Comparatively expensive.

79%
Belkin Conserve Insight Energy Use Monitor F7C005au, $50

Good points
- Very accurately records standby loads.
- Accurately records high loads.
- Display can be read away from socket as it has a cable.
- Very good instructions.

Bad points
- No display of amps, volts, power factor or kWh.

76%
DOSS 3 Way Wireless Power Meter WPM03, $65

Good points
- Very accurately records high loads.
- Wireless display unit can be read within 30 metres of the unit.
- Comes with three sensor units, so multiple appliances can be checked at once.
- Screens are easy to step through.

Bad points
- Very inaccurate for standby loads.
- Displays kWh to only one decimal point.

75%
Powertech Plus Wireless Energy Monitor MS6116, $80

Good points
- Very accurately records high loads.
- Wireless display unit can be read within 30 metres of the unit.
- Comes with three sensor units, so multiple appliances can be checked at once.
- Easy-to-step-through screens.

Bad points
- Very inaccurate for standby loads.
- Displays kWh to only one decimal point.

ABOUT THE REST

Any power meter on test will do the job if you mainly want to measure high power usage appliances. Even the least expensive, the **Doss Mains Power Meter MPM01**, is excellent for high usage accuracy. However, the meters differ for very low usage accuracy. Both **Doss** meters, both **Powertech** meters and the **Efergy** and **Arlec** only display kWh to one decimal place. This means they don't display low readings as accurately as those that display more than one decimal place. Ease of use also sets some meters apart. The models that don't make our What to Buy list are single units. These are plugged directly into the power socket, so reading the screen can be awkward (for example, if your meter is plugged in behind your TV).

The **CCI Power Mate** is listed separately in the table (page 52) as it's a 20-amp device (rated for appliances up to 15amp). Unlike the other meters on test it needs to be connected to an additional adapter (if used on a 10-amp circuit) before use. It's better for electricians than households.

Turning out the lights

After 9000 hours of continuous testing, only one CFL has made it without any failures, **Chris Barnes** reveals.

In our last report on CFLs (*CHOICE*, February 2011, page 62) the lamps had reached 6000 hours of testing – a little more than three years usage, assuming five hours use per day. They've now passed the 9000-hour mark (about five years usage), and we're about to start testing a new batch of CFLs and LED lights.

Several samples died after the 6000-hour mark. The **Megaman** proved the most durable, with no failures among its 10 samples. Overall, most lamps met their lifespan claims, although their light output dwindled during the testing process.

Typically for CFLs, the luminosity diminished most in the first few thousand hours. We checked several samples at the end of the test and found their luminosity had decreased by about 200-300 lumens (about 25%-30%) overall. Most of the tested models claim to be equivalent to a 75W incandescent, but are now only about 60W equivalent at best and their light is noticeably more yellow. The best are still good enough for general lighting, though you'd probably want to replace the worst cases, particularly if a new CFL nearby made the difference too stark.

Four lamps claim lifespans longer than 9000 hours. Both Mirabella models claim 10,000 hours but none of their samples made it that far, though the EEMSES-15 achieved a typical lifespan of 8600 hours and had very good luminosity, so we think it's still worth considering. The Woolworths Essentials also claims 10,000 hours, and with only one failure (just before the end of the test), the remaining nine samples looked likely to reach that mark. The Osram Dulux EL Longlife 15W/827 also had just one failure (at 6000 hours), but we can't know if the rest of its samples would have reached their claimed 15,000 hours.

For more information on CFLs, go to **choice.com.au/cfl**

- **Recommended** At least nine of the 10 samples achieved their claimed lifespans and have good or very good luminosity.
- **Worth considering** Achieved or came close to claimed lifespan and have at least OK luminosity.
- **Not recommended** Did not achieve their claimed lifespan and/or have comparatively poor luminosity.
- **Luminosity score** Based on the lamp's light output after 100 hours burn-in and after 6000 hours. The best-scoring CFLs started brighter than their claimed equivalent.
- **Approximate lifespan** As achieved in our test, based on median lifespan of tested samples (some may last longer). The lamps were tested for 9328 hours of on time. ■

Nutshell

➤The Megaman had no failures during our test. Overall, eight of the 15 tested models reached or exceeded their claimed lifespan and another three came close.

➤We're starting a new batch of 15W CFL testing, including one LED lamp (see New-Wave Lighting, page 6).

	PERFORMANCE				
	Luminosity score (%)	Claimed lifespan (hours)	Failures*	Approximate lifespan**	Price ($)
RECOMMENDED					
Philips Tornado TND12WWWBC	85	6000	2	9300	7.98
Megaman Zenia Tubular WL1514	70	8000	0	9300	4.95
WORTH CONSIDERING					
GE FLE15HLX/827/B22/T2	85	8000	8	7500	6.00
Mirabella EEMSES-15	85	10000	8	8600	5.00
GE FLE15TBX/827/E27/T3	70	8000	8	7300	4.75
# Osram Dulux EL Longlife 15W/827	70	15000	1	9300	na
Osram Duluxstar Minitwist 13W/827	65	6000	3	9300	6.50
Woolworths Essentials N3UN15	65	10000	1	9300	3.45
Envirolux Lucci 8000hr	60	8000	1	9300	6.95
Philips Genie GENIE14WWWES	60	6000	7	7100	7.98
NOT RECOMMENDED					
Mirabella EEU-15	55	10000	10	4600	5.00
Nelson Aladdin Mini MELQAL15BCS	55	6000	3	9300	6.50
Philips Ambiance AMB14WWWES	55	6000	4	9300	8.98
Lightstar CFL3	45	6000	8	4900	8.00
Nelson Aladdin Mini MELQAL15ESS	45	6000	5	8900	6.50

TABLE NOTES # Discontinued. * Out of 10 samples. ** See comment on claimed lifespan above. na Not applicable.

WHAT TO LOOK FOR

External battery charger allows you to recharge one battery while using another, and is particularly handy for camcorders with a shorter recording time.
A **remote** lets you control most functions, which can be very useful when you want to be in the shoot.
Video lamp/photo flash allows you to film or take still photos in low-light conditions.
An **accessory shoe** allows you to attach things to the camera such as an external microphone or video lamp.
An **optical image stabiliser** can help by adjusting internally for the camera movement, where the lens elements move to counter any hand shake.
An **input for an external microphone** usually provides better sound quality than a built-in one.
Dolby digital/surround sound either separates the audio into a two channel version of Dolby sound, or the surround sound feature separates sound into five channels, providing a home-theatre effect.
Still image primary memory type includes the SD removable memory format used on all of the HD camcorders on test, with Sony camcorders also using their Memory Stick Pro Duo (MS Pro Duo) card. SDHC (High Capacity) up to 32GB and SDXC (eXtended Capacity) potentially up to 2TB are perfectly suited

	PERFORMANCE													FEATURES						
	Overall score (%)	Ease of use score (%)	Sound quality score (%)	Versatility score (%)	Daylight picture quality score (%)	Artificial light picture quality score (%)	Low light picture quality score (%)	Image stabilisation score (%)	Autofocus score (%)	Macro score (%)	Still photo score (%)	Recording time per battery charge (min)	Remote control	Video lamp / photo flash	Accessory shoe	Dolby digital / surround sound	Microphone input	Headphone socket	Viewfinder (LCD)
Canon Legria HF S21	78	76	76	77	78	80	70	90	74	86	75	81	✓	✓/✓	✓	✓/✓	✓	✓	✓
Canon Legria HF S20	77	75	76	70	78	80	70	90	74	86	75	81	✓	✓/✓	✓	✓/✓	✓	✓	
Panasonic HDC-SDT750EG	74	80	55	75	79	78	80	70	90	69	56	106	✓	-/✓	✓	✓/✓	✓	✓	✓
Sony HDR-CX700V	72	65	77	76	83	74	75	53	93	51	69	151	✓	-/✓	✓	✓/✓	✓	✓	✓
Panasonic HDC-HS700	71	80	58	80	69	73	60	70	73	70	55	101	✓	-/✓	✓	✓/✓	✓	✓	✓
Panasonic HDC-SD700	70	80	58	73	69	73	60	70	73	70	55	110	✓	-/✓	✓	✓/✓	✓	✓	✓
Sony HDR-XR550VE	70	76	59	71	78	70	40	90	68	91	65	95	✓	-/✓	✓	✓/✓	✓	✓	✓
Canon Legria HF M31	67	68	63	69	60	70	50	90	62	91	59	96	✓	✓/✓	✓	✓/✓	✓	✓	
Canon Legria HF M306	66	68	62	57	60	70	50	90	62	91	59	96	✓	✓/✓	✓	✓/✓		✓	
Sony HDR-XR350V	66	74	50	51	71	70	70	63	70	91	63	115	✓	-/✓	✓	✓/-			
Samsung HMX-S10	65	68	69	54	75	70	70	70	54	62	47	103	✓	-/✓	✓	-/-	✓		
JVC Everio GS-TD1	64	68	74	57	53	58	65	50	93	34	64	162	✓	-/-	✓	✓/✓	✓	✓	
Sony HDR-PJ30V	63	63	61	65	64	60	60	40	100	57	50	146	✓	✓/✓	✓	✓/✓	✓	✓	
Sony HDR-CX110 BC	61	72	51	37	68	68	40	67	64	91	47	120		-/-		✓/-			
Sony HDR-PJ10	61	64	61	54	60	60	50	43	95	54	56	137	✓	-/-		✓/✓	✓	✓	
Sony HDR-XR150	61	72	51	42	68	68	40	67	64	91	47	101		-/-		✓/-			
Canon Legria HF R16	60	65	64	44	50	60	50	70	54	91	51	66		-/-		✓/-		✓	
Canon Legria HF R18	60	65	64	47	50	60	50	70	54	91	51	66		-/-		✓/-		✓	
Canon Legria HF R106	60	65	64	41	50	60	50	70	54	91	51	66		-/-		✓/-		✓	
Sony HDR-CX130E	60	61	84	45	60	51	50	33	95	54	46	143		-/-		✓/-			
Samsung HMX-H200	58	67	29	43	73	70	50	57	60	91	60	137		-/-		-/-			
Canon Legria HF R28	56	56	62	43	51	55	45	33	98	58	53	71		-/-		✓/-		✓	

USING THE TABLE Scores The overall score is made up of: Ease of use: 25%; Sound quality: 15%; Versatility: 10%; Daylight picture quality: 8%; Artificial light picture quality: 8%; Low light picture quality: 8%;

to the high storage demands of HD video. A **built-in GPS receiver** allows you to view and tag your location so you can not only find out exactly where you were when you shot your holiday video by clicking on a map shown on your camcorder screen, but also place the link on Google Maps forfriends to watch it online.

Video transfer speed
Look for speed ratings on the memory card such as Class 4 or Class 6; the higher the number, the higher the speed.

High Definition Multimedia Interface (HDMI) All the HD camcorders on test will play through a HDMI, providing the best possible audio and picture quality. However, you need an HDMI connection on your home entertainment equipment, and a mini HDMI to HDMI cable as almost all HD camcorders have a mini HDMI connection.

SPECIFICATIONS

	Other features	Inbuilt video / still photo storage	Removable memory type	Still photo image resolution (Mp)	LCD monitor size (mm, diagonal)	Weight (g)	Dimensions (cm, H x W x L)	Optical zoom factor	Contact	Price ($)
cal		Flash memory 64GB / memory card	SDHC x 2	8.0	89	508	9 x 8 x 15	10	canon.com.au	1399
cal		Flash memory 32GB / memory card	SDHC x 2	8.0	89	508	9 x 8 x 15	10	canon.com.au	1199
cal	3D video	Memory card	SDXC / SDHC	2.5	76	645	7 x 7 x 14	12	panasonic.com.au	1999
cal	GPS	Flash memory 96GB / memory card	SDXC / SDHC / MS Pro Duo	6.1	75	446	8 x 8 x 14	10	sony.com.au	1799
cal		HDD 240GB / memory card	SDXC / SDHC	7.9	76	507	8 x 7 x 15	12	panasonic.com.au	2099
cal		Memory card	SDXC / SDHC	7.9	76	440	8 x 7 x 15	12	panasonic.com.au	1499
cal	GPS	HDD 240GB / memory card	SDHC / MS Pro Duo	12.0	87	550	8 x 8 x 15	10	sony.com.au	1599
cal		Flash memory 32GB / memory card	SDHC	3.0	69	372	8 x 6 x 13	15	canon.com.au	899
cal		Memory card	SDHC	3.0	69	372	8 x 6 x 13	15	canon.com.au	749
cal	GPS	HDD 160GB / Memory card	SDHC / MS Pro Duo	7.0	67	445	7 x 7 x 13	12	sony.com.au	1299
ical		Memory card	SDHC	10.0	88	470	7 x 7 x 13	15	samsung.com.au	999
ctronic	3D video	Flash memory 64GB / memory card	SDXC / SDHC	2.9	88	674	10 x 6 x 19	10	jvc.com.au	2199
ical	GPS, projector	Flash memory 32GB / memory card	SDXC / SDHC / MS Pro Duo	7.1	75	390	7 x 7 x 13	12	sony.com.au	1399
ctronic		Memory card	SDHC / MS Pro Duo	3.1	67	260	6 x 7 x 12	25	sony.com.au	499
ical	Projector	Flash memory 16GB / memory card	SDXC / SDHC / MS Pro Duo	3.3	75	360	7 x 7 x 13	30	sony.com.au	999
ctronic		HDD 120GB / memory card	SDHC / MS Pro Duo	3.1	67	354	7 x 7 x 12	25	sony.com.au	929
ctronic		Flash memory 8GB / memory card	SDHC	1.6	69	320	7 x 7 x 13	20	canon.com.au	599
ctronic		Flash memory 32GB / memory card	SDXC / SDHC	1.6	69	320	7 x 7 x 13	20	canon.com.au	699
ctronic		Memory card	SDHC	1.6	69	320	7 x 7 x 13	20	canon.com.au	549
ical		Memory card	SDXC / SDHC / MS Pro Duo	3.3	75	298	7 x 6 x 13	30	sony.com.au	699
ical		Memory card	SDHC	2.1	67	323	7 x 7 x 12	20	samsung.com.au	499
ctronic		Flash memory 32GB / memory card	SDXC / SDHC	2.1	75	305	8 x 6 x 13	20	canon.com.au	699

ge stabilisation: 8%; Autofocus: 8%; Macro 5%; Still photo: 5%. **Price** Recommended retail, as of June 2011.

WHAT TO BUY

MEDIUM TVS (102CM – 107CM)

73%
Sony KDL40CX520, $999

Good points
- Very good for viewing Blu-ray, HD broadcast, angles, games consoles and photos.

Bad points
- On-board controls are very poorly labelled.
- Remote control has some very small keys and some are too closely spaced.
- No channel favourites function.

72%
Samsung UA40C5000QFXXY, $1699

Good points
- Very good for viewing HD broadcast.
- Two USB ports.
- Ethernet port.
- Good remote control.
- Excellent energy score.

Bad points
- Only 12-month warranty.
- Only one component input.

71%
Samsung UA40D6600, $2099

Good points
- Best sound quality on test.
- Very good for viewing game consoles and HD broadcast.
- Good quality closed-captions text.

Bad points
- On-board controls are at the back.
- Very dim power indicator.
- Poor motion blur performance.
- Very poor DVD noise reduction.

MEDIUM TVS	PERFORMANCE								SPECIFICATIONS				
	Overall score (%)	Broadcast TV score (%)	DVD viewing score (%)	Blu-ray viewing score (%)	Sound quality score (%)	Ease of use score (%)	Energy score (%)	Viewing angle score (%)	Screen size (cm)	Screen resolution (pixels)	Backlighting type	3D-capable	Price ($)
# **Sony** KDL40CX520	73	82	68	82	67	63	73	80	102	1920 x 1080	CCFL		999
Samsung UA40C5000QFXXY	72	84	74	75	40	69	95	80	102	1920 x 1080	LED		1699
# **Samsung** UA40D6600	71	80	58	78	71	67	80	75	102	1920 x 1080	LED	√	2099
# **Sony** KDL40EX520	71	82	62	78	59	64	80	80	102	1920 x 1080	LED		1249
Sony KDL40HX800	70	68	67	80	56	71	75	80	102	1920 x 1080	LED	√	1999
Toshiba 40RV700A	69	80	64	80	37	66	75	80	102	1920 x 1080	CCFL		1099
Samsung PS42C451B2DXXY	68	68	74	70	45	69	83	80	107	1024 x 768	Plasma		949
# **Sharp** LC-40LE820X	68	76	62	69	70	59	80	70	102	1920 x 1080	LED		1899
Samsung LA40C650L1FXXY	66	62	76	65	45	69	77	80	102	1920 x 1080	CCFL		1299
Sony KDL40EX500	63	61	63	65	45	67	84	80	102	1920 x 1080	CCFL		1099
Sony KDL40HX700	62	65	58	55	45	67	82	80	102	1920 x 1080	CCFL		1999
Sharp LC40LE700X	52	50	52	40	35	56	93	80	102	1920 x 1080	LED		1699
# **Kogan** KGNFHDLEDH40VAA	44	39	44	47	39	52	73	20	102	1920 x 1080	LED		1049
Vivo LTV42FHDQ	42	41	30	45	25	50	78	80	107	1920 x 1080	CCFL		799

71%

Sony KDL40EX520, $1249

Good points

- Very good for viewing game consoles, HD broadcast, angles and photos.

Bad points

- On-board controls are very poorly labelled.
- Remote control has some very small keys.
- High sound volumes produce distortion at about 60% and higher.
- No channel favourites function.

70%

Sony KDL40HX800, $1999

Good points

- Very good for viewing Blu-ray.
- Pedestal stand allows a small degree of tilt adjustment.
- USB ports.
- Ethernet port.

Bad points

- None to mention.

Watching the costs

As you'll see from the tables (opposite and page 61), the performance of some brands that are normally considered "cheap" is well below that of the more mainstream brands. Some of these brands claim they're using components from their bigger competitors and, by inference, that their TVs will perform just as well. This is obviously not the case with those on test here.

In the small TV category, the Sony KDL32CX520 ($799) would be a much better buy than either of the Sanyo products, and at a lower price. And it would be hard to pass up the 102cm Sony KDL40CX520 ($999) for the more expensive and poor-performing Kogan TV. If price is your primary concern, keep an eye out for a good deal on a well-known, reliable brand before going down market to a less well-regarded one.

Extra! Extra!

Some extras are fast becoming standard on TVs, so here's the lowdown on what they all mean.

3D is now available on some more expensive models. 3D Blu-ray movies are slowly increasing in number, but free-to-air 3D broadcasts are infrequent at best.

DLNA (Digital Living Network Alliance) is a fancy name for an agreement between manufacturers to produce open standards that allow devices to talk to each other over a computer network. When it works, the connection is pretty seamless, but when it doesn't, finding a solution can be tricky.

Wi-Fi TVs are becoming a way of viewing all sorts of online information, and Wi-Fi is a convenient way to connect to your home network without wires.

Widgets To make connecting to specific websites or other online services easy, many TVs now come with built-in links that appear as icons on a menu screen.

Skype allows you to make video and audio calls to other Skype-enabled systems at no charge, as well as to normal phones at a cost. It's enabled on many TVs, but you'll need a video camera/microphone, usually sold as an optional extra.

Third party deals Some TV manufacturers have done deals with ISPs to allow free downloads, or for other online media you would otherwise have to pay for. Check carefully that they really add value to the product, and bear in mind there's rarely a guarantee the service will last.

USB and solid state card connections can be used for playing back material you've recorded or downloaded. Some TVs will also allow you to record to a USB device or a card.

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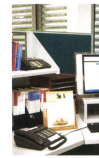

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Hard Word

FULL STEAM AHEAD!

CHOICE buyer Dot was quite bemused when she came across this fast slow cooker.

THICK BREAD OR THICKHEADS?

Peter Buckley wonders whether "thick" on this bread label refers to slice size, or the slice of the population it might be expected to benefit.

Unbalanced spin

Bottlebrush essence for "coping with change"? This water makes some flowery claims.

Thanks this month go to John and Shirley Dermer, Dot Kneale, Peter Buckley, Sheree Westthorp and Ann Carter. If you have any examples you think should be shared with other CHOICE members, send them with your full name to The Hard Word, CHOICE, 57 Carrington Road, Marrickville, NSW 2204. Please don't email us your entries – we need the unmarked originals.

Australia by AIW Printing Pty Ltd., 26–30 Parsons Avenue, Springvale 3171 in 2011 for the publisher, CHOICE, 57 Carrington Road, Marrickville 2204.